



**Weston Solutions of Michigan, Inc.**  
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June 8, 2010

Mr. Jeffrey Kimble  
On-Scene Coordinator  
United States Environmental Protection Agency  
9311 Groh Road  
Grosse Ile, MI 48138

**Subject: Bon Brae/Harper Site Removal Action  
St. Clair Shores, Macomb County, Michigan  
Technical Direction Document No.: S05-0001-0912-017  
Work Order No.: 20405.012.001.0893.00  
Document Control No.: 893-2A-AHAW**

Dear Mr. Kimble:

The United States Environmental Protection Agency (U.S. EPA) tasked the Superfund Technical Assessment and Response Team (START) contractor, Weston Solutions, Inc. (WESTON®), to provide oversight and technical support of the removal action at the Bon Brae/Harper Site in St. Clair Shores, Macomb County, Michigan (the Site). Specifically, under Technical Direction Document (TDD) No. S05-0001-0912-017, U.S. EPA requested WESTON START to perform the following:

- Provide written and photographic documentation of Site conditions and activities
- Assist the U.S. EPA Field Environmental Decision Support (FIELDS) Team and Environmental Consulting and Technology (ECT) with additional investigation work
- Manage Site files and information
- Gather all historical data and provide the data to ECT
- Provide information for U.S. EPA Pollution Reports
- Periodically update the St. Clair Shores website at [epaosc.org](http://epaosc.org)
- Perform oversight of the removal, transportation, and disposal and decontamination methods
- Provide technical support to the U.S. EPA On-Scene Coordinator (OSC)

In addition, WESTON START performed oversight of (1) dewatering and high-pressure jet-vacuuming activities to remove contaminated sediment in the drain conducted by the Emergency and Rapid Response Services (ERRS) contractor, Environmental Quality Management Inc. (EQM), and its subcontractor, Inland Waters of Ohio (Inland) and (2) installation of weirs in the drain along Bon Brae Street and Harper Avenue performed by EQM. On-site removal activities began on March 8, 2010, and were completed on April 23, 2010.



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The table below summarizes the organization of the removal action.

Organization of Removal Action Bon Brae/Harper Site Removal Action		
Agencies or Parties Involved	Contact	Description of Participation
U.S. EPA – Region V Division of Superfund – ERB 9311 Groh Road Grosse Ile, MI 48138	Jeffrey Kimble	Federal OSC responsible for overall project oversight and success
Weston Solutions, Inc. 7800 West Outer Drive, Suite 200 Detroit, MI 48207 (313) 739-2527	Lori Kozel	WESTON START project manager responsible for removal support; provided oversight, documentation, technical support, monthly reporting, and WESTON START-related cost-tracking
Environmental Quality Management, Inc. 1800 Carillon Boulevard Cincinnati, OH 45240 (513) 659-5875 voice mail <b>Sub-Contractor:</b> Inland Waters of Ohio	Bill Poma	Response manager responsible for direction of daily ERRS activity; provided personnel and equipment necessary for all removal activities, coordinated transportation and disposal of waste, and tracked ERRS-related costs

This letter report discusses the Site description, background, and removal action activities, and presents conclusions based on the removal action.

## SITE DESCRIPTION

The Site is located northeast of the City of Detroit and on the western shore of Lake St. Clair (see Figure 1 in Attachment A). The geographical coordinates of the Site are latitude 42° 29' 12" North and longitude -82° 53' 56" West. The Site includes a portion of the Ten Mile Drain (TMD) System that empties into a residential canal system. The Site and a suspected polychlorinated biphenyl (PCB) source area are located in a mixed residential/commercial area at the intersection of Bon Brae Street and Harper Avenue in St. Clair Shores, Macomb County, Michigan 48081.

The areas of concern for this Site include sewer lines in and around the intersection of Bon Brae Street and Harper Avenue and other areas to be determined for further investigation and sampling.

## BACKGROUND

The U.S. EPA completed the TMD System removal project in March 2003. The project included, but was not limited to, cleaning of the sewer system, removal of sediment in the canals, and soil sampling in residential areas. Post-removal site controls agreed to by the Macomb



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County Public Works Commissioners Office (MCPWCO) were then initiated. MCPWCO completed dredging of the canals and re-cleaned a section of the TMD System lines. In April 2004, MCPWCO completed the re-cleaning of the drain and the outfall area where the sewer lines emptied into the canal. In June 2004, MCPWCO initiated quarterly PCB sampling in the drain. Based on the results, PCBs were present at levels as high as 1,300 micrograms per liter in the drain water and were believed to be residual contamination.

In July 2004, MCPWCO initiated a Phase I-type assessment of the Harper Avenue and Bon Brae Street area in St. Clair Shores, Michigan. In September 2004, MCPWCO completed the second round of quarterly PCB sampling and detected PCBs in sediment at the outlet of the drain at 770 milligrams per kilogram (mg/kg). In December 2004, MCPWCO conducted the third round of PCB sampling in the drain and detected PCBs at levels as high as 17,000 mg/kg in the drain. After this round of sampling, MCPWCO initiated soil boring sampling of the backfill surrounding the drain to attempt to determine if a source of PCBs was re-contaminating the drain. Results indicated that PCBs were present in backfill surrounding the drain at levels as high as 41,000 mg/kg. In January 2005, MCPWCO collected sediment samples from the drain near the intersection of Harper Avenue and Bon Brae Street and detected PCBs at extremely high levels (up to 200,000 mg/kg).

In May 2005, U.S. EPA and the Michigan Department of Environmental Quality (now the Michigan Department of Natural Resources and Environment [MDNRE]) installed 64 additional soil borings in the suspected source area to attempt to better define the extent of PCB contamination in this area. PCBs were detected in the sand and gravel backfill surrounding the drain and appeared centered in the area near the intersection of Harper Avenue and Bon Brae Street. Based on data collected from this effort, a feasibility study was developed that evaluated alternatives to address this source of PCB contamination at the Site.

The May 2005 investigation also revealed one surface soil area contaminated with PCBs at approximately 800 mg/kg. In the spring and summer of 2006, U.S. EPA conducted another removal action to address this area of contamination. The removal action consisted of removing shallow surface soil with low-level PCB concentration, removing sediment from a portion of the sewer system, and lining a portion of the sewers along Bon Brae Street and Harper Avenue with cured-in-place pipe (CIPP) to attempt to impede PCB infiltration into the sewers.

In late 2009 inside the CIPP-lined portion of the sewer, City of St. Clair Shores contractor ECT discovered oil that was more than 80 percent PCBs (over 800,000 parts per million). The City of St. Claire Shores and ECT asked for assistance from U.S. EPA in addressing this almost pure chemical waste in the sewers.

On December 10, 2009, the U.S. EPA Emergency Response Branch (ERB) and Remedial Branch staff attended several meetings to discuss current and new findings related to the high levels of PCBs detected in the TMD storm sewer system. The first two meetings were with agency officials and political leaders to inform stakeholders of the new information. Besides



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U.S. EPA staff, St. Clair Shores city officials, Macomb County Sewer District officials, the environmental consulting firm ECT, MDNRE, and several political aides attended the meetings.

During those meetings, the City of St. Clair Shores, Macomb County Sewer District, and ECT presented information about their plans and current actions to clean sewer manholes, including ECT's plan to place a series of weirs in the sewers (after cleaning) to provide places for sediment to build up and allow for collection, thereby potentially targeting and better identifying the source area. The City of St. Clair Shores and ECT expressed their desire for U.S. EPA assistance in removing approximately 1 gallon of oil containing 820,000 ppm PCBs currently present in the drain system discovered in the CIPP-lined portion of the sewer during the late 2009 sampling event discussed above. ECT and the City of St. Clair Shores both expressed fears that if they conducted this work, the remainder of the budget for the overall project would be used up and they would not be able to complete the planned work. The group felt that this action should be conducted as soon as possible to eliminate the potential for PCBs to migrate down the sewer and threaten the canals.

After these meetings, U.S. EPA and the other stakeholders attended a public meeting with area residents. The originally planned intent of this meeting was for MDNRE and the U.S. EPA remedial program to inform residents about progress made on scoring the Site for the National Priorities List. The future of the Site and new findings were discussed.

Subsequent meetings between U.S. EPA and ECT identified immediate concerns and time-critical concerns at the Site. ECT shared current information with U.S. EPA, and this information was used to plan subsequent activities.

On December 30, 2009, U.S. EPA initiated a small emergency response action at the Site. Plastic snares (oil collectors) were attached to a weighted device and placed in the sewer downstream of the location where the high-level PCB oil was detected to prevent migration to the canals.

On March 8, 2010, U.S. EPA mobilized WESTON START and the ERRS contractors to the Site to initiate removal action activities.

## **REMOVAL ACTION ACTIVITIES**

All removal action activities were conducted in accordance with a site-specific health and safety plan and site emergency contingency plan. Attachment B provides photographic documentation of Site conditions and removal action activities. The activities completed as part of this removal action included the following:

- Dewatering and high-pressure jet-vacuuming of the sewer along Bon Brae Street and down Harper and Jefferson Avenues to remove sediment
- Stabilization, transportation, and disposal of the PCB-contaminated sediment



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- Installation of temporary weir structures in 15 manhole locations to allow sediment collection points
- A geophysical survey of the area near the sewer where contamination was present, and advancement of soil borings and collection of soil samples from suspected source areas

Each activity is discussed below.

### **Dewatering and Jet-Vacuuming of Sewer**

Dewatering of the sewer began on March 15, 2010, when the ERRS contractor installed a large steel plate at the outfall. Two large pumps also were installed and continually pumped water over the steel plate for the first day. After the initial 24 hours, the pump was turned on as needed to keep the sewer free of water for jet-vacuuming activities. From March 29 through April 12, 2010, Inland jet-vacuumed the sewer along Bon Brae Street. The intersections of Bon Brae Street and Harper Avenue and Bon Brae Street and Jefferson Avenue also were also cleaned of sediment and debris.

### **Stabilization, Transportation, and Disposal of PCB-Contaminated Sediment**

Inland off-loaded the removed sediment from the sewer into roll-off boxes at a staging area located in the parking lot at 19700 Pleasant Street. The sediment was solidified using sawdust and mixed within the roll-off boxes. The off-site disposal activities began on April 14, 2010, and were completed on April 23, 2010, when the last roll-off box of PCB-contaminated sediment was transported for disposal. During the loading of the PCB-contaminated sediment, ERRS work activities were monitored for visible emissions.

All PCB-contaminated sediment was disposed of off site at a U.S. EPA-approved disposal facility in accordance with the U.S. EPA Off-Site Rule (Title 40 of the *Code of Federal Regulations* [CFR], Section 300.440). The waste was transported to the Wayne Disposal Inc. Site 2 Landfill in Belleville, Michigan, for disposal. A total of five roll-off boxes of PCB-contaminated sediment (approximately 46.03 tons) were transported off site for disposal under manifest No. 007205784 through 007205788.

### **Weir Installation**

EQM installed 15 weirs at manhole locations along the sewer (see Figure 2 in Attachment A). Each weir was retrofitted for the specific manhole and properly installed. The weirs were constructed of aluminum with a gasket-like material at the base and were secured in place. The weirs are to act as sediment traps in the sewer to help identify the area(s) where PCBs are entering the sewer.

### **Geophysical Survey and Soil Boring Activities**

The U.S. EPA FIELDS Team initiated a geophysical survey using electromagnetic and ground-



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penetrating radar devices to identify the location of any buried transformers, drums, or tanks that may be the source of the PCB oil discovered in the sewer. The survey was performed at the following locations:

- Along Bon Brae Street between manholes M7177 (west of Harper Avenue) and M7183 (east of E Street): Survey included public and private property, including residential yards, from Bon Heur Street to Lakeland Street
- Along Harper Avenue between Lakeland and Bon Heur Streets: survey included public and private property from the curb line to the rear lot line of the commercial properties

A joint effort between ECT and WESTON START was implemented to secure access to private properties, conduct detailed photographic and video documentation of each property, arrange for utility location, and direct the U.S. EPA FIELDS Team on where to perform the survey. A total of 93 access agreements were obtained providing access for the geophysical survey and for drilling soil borings if necessary.

The U.S. EPA FIELDS Team geophysical survey resulted in the identification of six anomaly areas. These six areas were flagged for soil boring investigation along with additional areas where data was needed to fill data gaps. Areas where U.S. EPA or the City of St. Clair Shores received possible leads on "dump areas" were also investigated.

Soil borings were installed at 43 locations on a total of 11 properties using a track-mounted Geoprobe provided by the U.S. EPA FIELDS Team (see Figure 3 in Attachment A). ECT logged each soil boring, and the logs are included in Attachment C. The table below summarizes the sampling effort.

Sampling Summary Bon Brae/Harper Site Removal Action		
Address	No. of Boring Locations	No. of Samples <sup>a</sup>
Bon Brae Street	2	4
Bon Brae Street	2	4
Bon Brae Street	2	4
Lakeland Street	1	3
Lakeland Street	2	4
Bon Heur	3	7
Harper Street	8	20
Harper Avenue	6	12
Harper Avenue	14	33
Harper Avenue	1	2
Harper Avenue	2	5
<b>Totals</b>	<b>43</b>	<b>98</b>

Note:

a Numbers of samples include quality assurance/quality control (QA/QC) samples.



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The samples were submitted to Test America of North Canton, Ohio, for PCB analysis. Of the 98 soil samples collected, results for two soil samples exceeded the Toxic Substances Control Act limit of 50 parts per million (ppm) and results for four soil samples exceeded the MDNRE Residential Direct Contact Criterion of 4 ppm. All of these exceedances came from the same property (█████ Harper). Table 1 in Attachment D summarizes the soil boring sample results, and Figure 4 in Attachment A shows the locations of the exceedances. Attachment E provides the data validation reports for the samples collected.

The geophysical survey and soil boring activities began on April 7, 2010, and concluded on April 21, 2010.

## **CONCLUSIONS**

The U.S. EPA removal action at the Site resulted in the removal of PCB-contaminated sediment from the TMD System storm sewer along Bon Brae Street from Harper Avenue to Jefferson Avenue. The removal action also extended west of Harper Avenue along with portions south of Bon Brae Street on Harper and Jefferson Avenues to mitigate further migration of contaminated sediment to the residential canal system. A total of 15 weirs were installed in an attempt to trap contaminated sediment to (1) prevent future migration of PCB-contaminated sediment from upgradient sources into the residential canals and (2) target and potentially define the PCB contaminant source area. In addition, soil samples were collected from 43 borings and analyzed for PCBs. However, the extent of the removal action activities and soil investigation were limited to the scope of the ERB and will be followed by future work with U.S. EPA's Remedial Branch.

This letter report serves as the final TDD deliverable for this Site. All tasks pertaining to this TDD have been completed. If you have any questions or comments regarding this report, please contact me at (313) 739-2527.

Sincerely,  
WESTON SOLUTIONS, INC.

Lori Kozel  
WESTON START Project Manager

Attachments:

- A – Figures
- B – Photographic Documentation
- C – Soil Boring Logs
- D – Table
- E – Data Validation Reports

cc: WESTON START DCN File

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**ATTACHMENT A**  
**FIGURES**

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Image Source: ESRI US Topo Maps



File: D:\SL\_Clair\_Shores\mxd\F1\_Site\_Location\_Topo.mxd, 06-Jun-10 10:13, wojidakon

#### Legend

■ Site Boundary  
0 2,000 Feet



Prepared for:  
**U.S. EPA REGION V**  
Contract No.: EP-S5-06-04  
TDD: S05-0001-0912-017  
DCN: 893-2A-AHAW



Prepared By:  
**WESTON  
SOLUTIONS, INC.**  
7800 Outer Drive  
Suite 200  
Detroit, Michigan 48235

**Figure 1**  
Site Location Map  
Bon Brae/Harper Site Removal Action  
St. Clair Shores, Macomb County,  
Michigan

**FIGURES 2-4: SOIL SAMPLING MAPS  
HAVE BEEN REDACTED – THREE PAGES**

**CONTAINS POTENTIAL PERSONALLY-IDENTIFYING INFORMATION**

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**ATTACHMENT B**  
**PHOTOGRAPHIC DOCUMENTATION**

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**Site:** Bon Brae/Harper

**Photograph No.:** 1

**Direction:** West

**Subject:** ERRS contractor preparing steel plate for insertion into canal

**Date:** 3/17/10

**Photographer:** Lori Kozel



**Site:** Bon Brae/Harper

**Photograph No.:** 2

**Direction:** Southwest

**Subject:** One of two pumps being installed at outfall

**Date:** 3/17/10

**Photographer:** Lori Kozel



**Site:** Bon Brae/Harper

**Photograph No.:** 3

**Direction:** West

**Subject:** Plate in place and both pumps actively working

**Date:** 3/17/10

**Photographer:** Lori Kozel



**Site:** Bon Brae/Harper

**Photograph No.:** 4

**Direction:** West

**Subject:** Staging area set-up and installation of splash guard on roll-off box

**Date:** 3/19/10

**Photographer:** Lori Kozel



**Site:** Bon Brae/Harper

**Photograph No.:** 5

**Direction:** West

**Subject:** Inland jet-vacuuming along Bon Brae Street

**Date:** 3/22/10

**Photographer:** Lori Kozel



**Site:** Bon Brae/Harper

**Photograph No.:** 6

**Direction:** Northwest

**Subject:** Off-loading of removed sediment from drain

**Date:** 3/24/10

**Photographer:** Lori Kozel



**Site:** Bon Brae/Harper

**Photograph No.:** 7

**Direction:** Northwest

**Subject:** Solidification of sediment with sawdust

**Date:** 3/29/10

**Photographer:** Lori Kozel



**Site:** Bon Brae/Harper

**Photograph No.:** 8

**Direction:** Down

**Subject:** Retro-fitted weir ready for installation

**Date:** 3/29/10

**Photographer:** Lori Kozel



**Site:** Bon Brae/Harper

**Photograph No.:** 9

**Direction:** Down

**Subject:** ERRS contractor ready to install weir in manhole M7177

**Date:** 3/29/10

**Photographer:** Lori Kozel



**Site:** Bon Brae/Harper

**Photograph No.:** 10

**Direction:** East

**Subject:** Weir secured in place at manhole M7177

**Date:** 3/29/10

**Photographer:** ERRS



**Site:** Bon Brae/Harper

**Photograph No.:** 11

**Direction:** South

**Subject:** U.S. EPA FIELDS Team conducting geophysical survey at [REDACTED] Harper Avenue

**Date:** 4/07/10

**Photographer:** Sean Kane



**Site:** Bon Brae/Harper

**Photograph No.:** 12

**Direction:** North

**Subject:** U.S. EPA FIELDS Team conducting geophysical survey in residential area

**Date:** 4/08/10

**Photographer:** Sean Kane



**Site:** Bon Brae/Harper

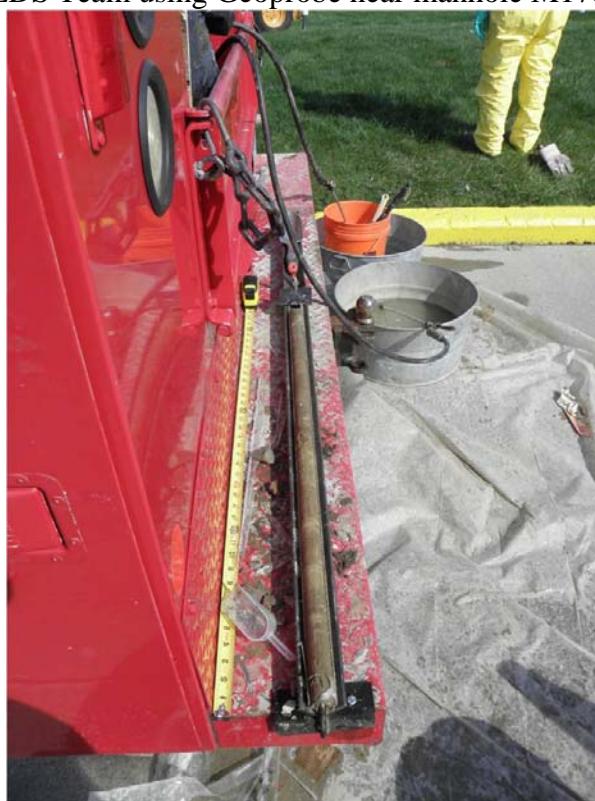
**Photograph No.:** 13

**Direction:** West

**Subject:** U.S. EPA FIELDS Team using Geoprobe near manhole M178

**Date:** 4/14/10

**Photographer:** Sean Kane



**Site:** Bon Brae/Harper

**Photograph No.:** 14

**Direction:** Down

**Subject:** Soil core from Geoprobe location

**Date:** 4/25/10

**Photographer:** Annette DeMaria

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**ATTACHMENT C**  
**SOIL BORING LOGS**

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Environmental Consulting & Technology, Inc.

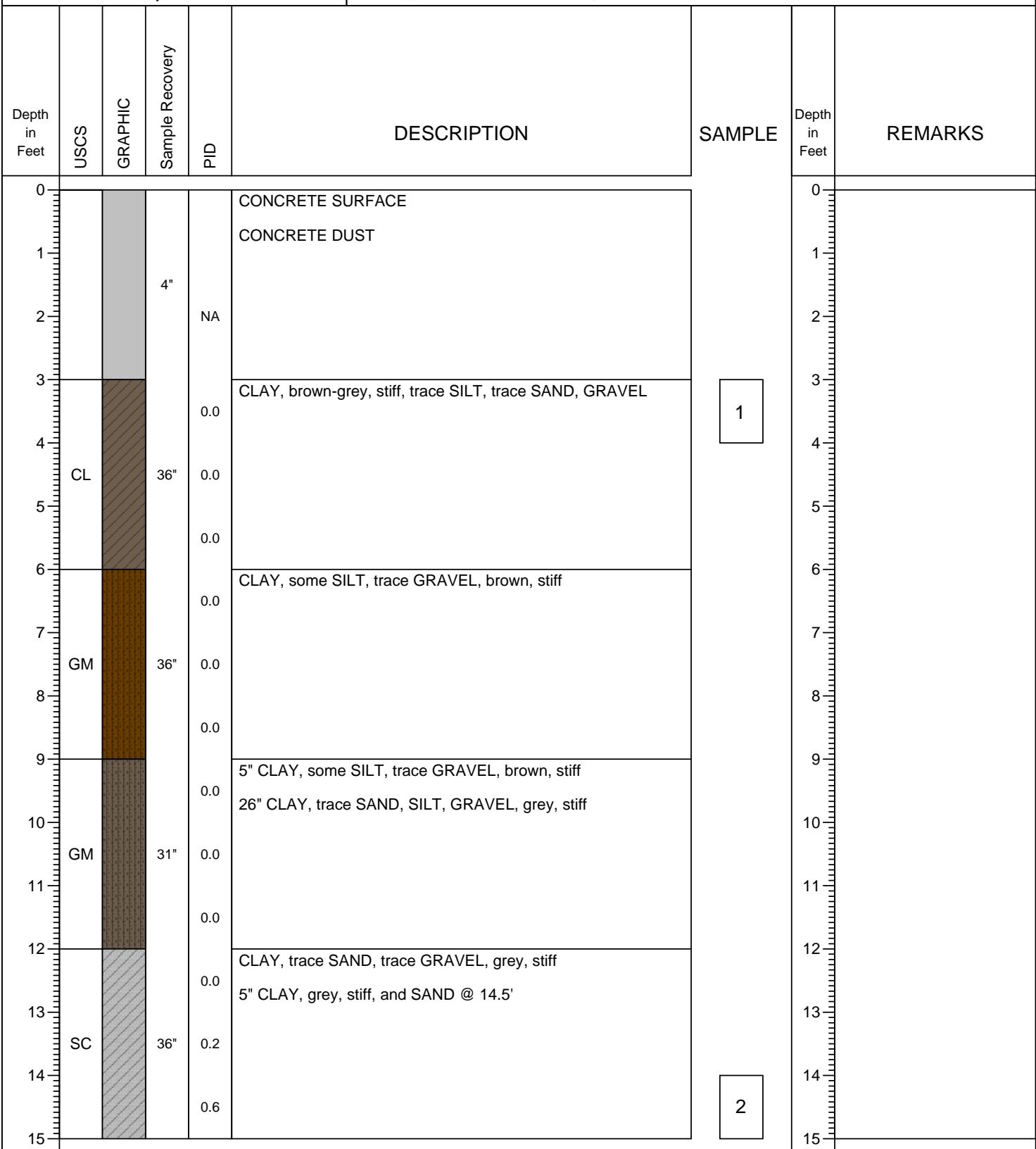
Bon Brae SB-01

St. Clair Shores Drain Site #2  
St. Clair Shores, Michigan

Date Completed : 4/14/2010  
Hole Diameter : 2.5 inches  
Drilling Company : EPA (Field Team)  
Drilling Method : Geoprobe  
ECT Rep. : John Kennedy

Boring Location : Right-of-Way  
: Bon Brae  
: St. Clair Shores, Michigan

ECT Project #10-0304





*Environmental Consulting & Technology, Inc.*

# Bon Brae SB-02

St. Clair Shores Drain Site #2  
St. Clair Shores, Michigan

Date Completed	: 4/14/2010	Boring Location	: Right-of-Way
Hole Diameter	: 2.5 inches		: [REDACTED] Bon Brae
Drilling Company	: EPA (Field Team)		: St. Clair Shores, Michigan
Drilling Method	: Geoprobe		
ECT Rep.	: John Kennedy		

ECT Project #10-0304

Depth in Feet	USCS	GRAPHIC	Sample Recovery	PID	DESCRIPTION	SAMPLE	Depth in Feet	REMARKS
0					7" SAND, brown, fine to medium, damp 6" CLAY and SAND, brown, stiff, damp 3" SAND, brown, fine to medium, damp	1	0	
1	SC		16"	0.0			1	
2				0.0			2	
3				0.0	NA		3	
4				na			4	
5							5	
6							6	
7							7	
8	GC		36"	0.0	CLAY, trace GRAVEL, trace SAND, brown-grey, stiff, mottled, damp	2	8	
9				0.0			9	
10				0.0			10	
11	GM		36"	0.0	CLAY, some SILT, trace SAND, GRAVEL, grey, stiff		11	
12				0.0			12	
13				0.0			13	
14	GM		36"	0.0	CLAY, trace SILT, SAND, GRAVEL, grey, stiff		14	
15				0.0			15	



Environmental Consulting & Technology, Inc.

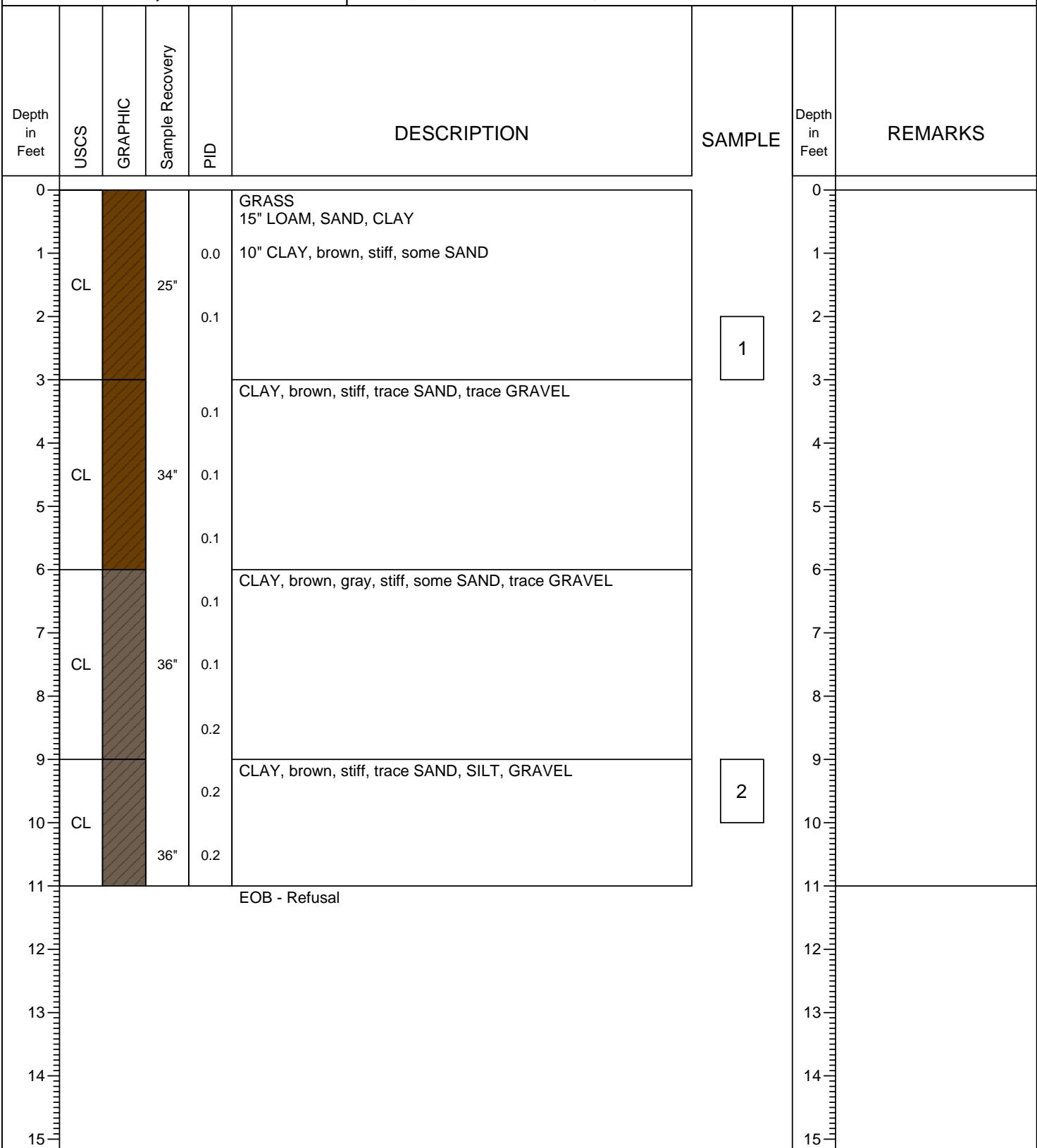
Bon Brae SB-01

St. Clair Shores Drain Site #2  
St. Clair Shores, Michigan

Date Completed : 4/20/2010  
Hole Diameter : 2.5 inches  
Drilling Company : EPA (Field Team)  
Drilling Method : Geoprobe  
ECT Rep. : John Kennedy

Boring Location : Residential  
: Bon Brae  
: St. Clair Shores, Michigan

ECT Project #10-0304





Environmental Consulting & Technology, Inc.

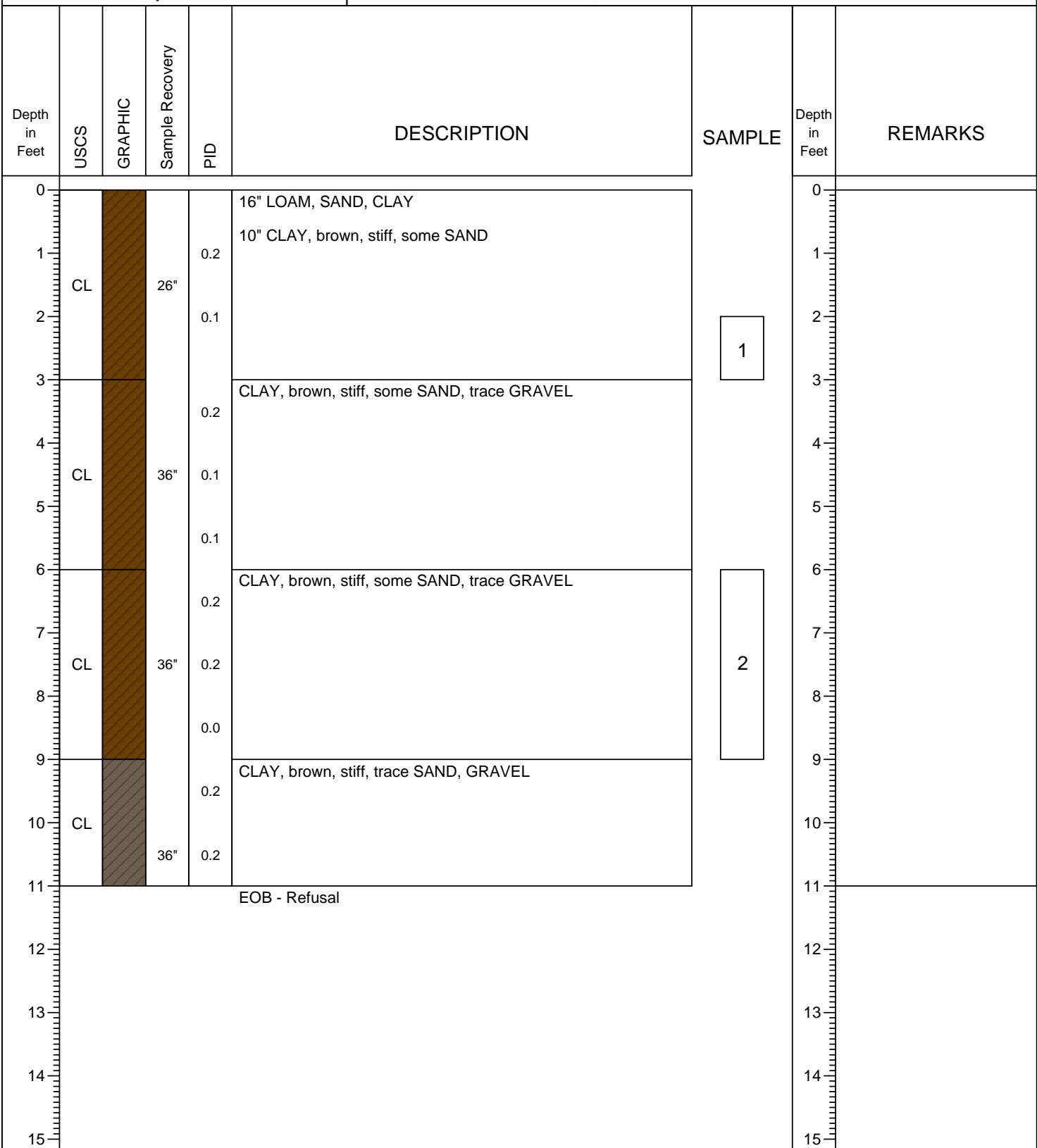
Bon Brae SB-02

St. Clair Shores Drain Site #2  
St. Clair Shores, Michigan

Date Completed : 4/20/2010  
Hole Diameter : 2.5 inches  
Drilling Company : EPA (Field Team)  
Drilling Method : Geoprobe  
ECT Rep. : John Kennedy

Boring Location : Residential  
: Bon Brae  
: St. Clair Shores, Michigan

ECT Project #10-0304





*Environmental Consulting & Technology, Inc.*

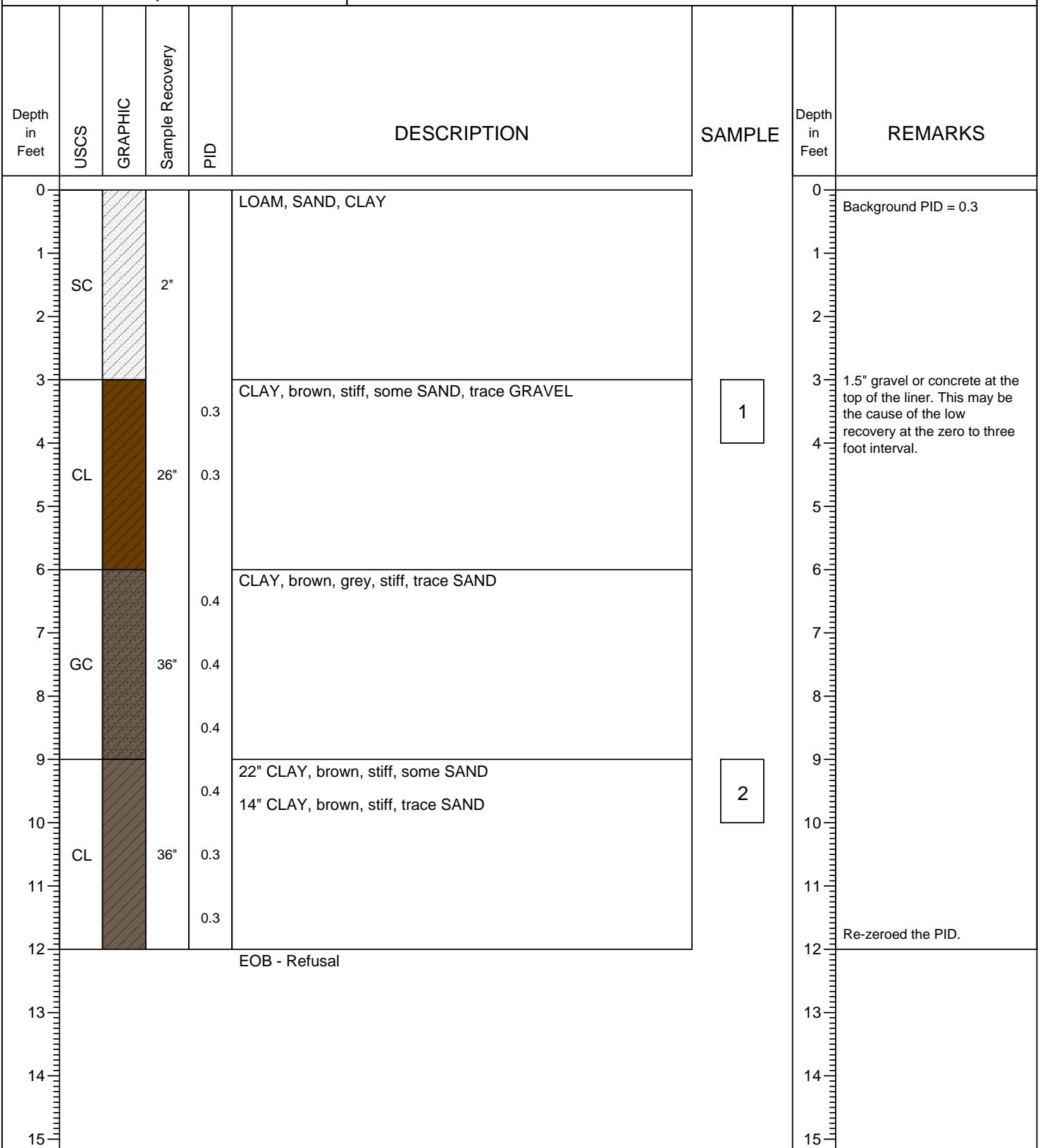
Bon Brae SB-01

St. Clair Shores Drain Site #2  
St. Clair Shores, Michigan

Date Completed : 4/20/2010  
Hole Diameter : 2.5 inches  
Drilling Company : EPA (Field Team)  
Drilling Method : Geoprobe  
ECT Rep. : John Kennedy

Boring Location : Residential  
: Bon Brae  
: St. Clair Shores, Michigan

ECT Project #10-0304





*Environmental Consulting & Technology, Inc.*

Bon Brae SB-02

**St. Clair Shores Drain Site #2**  
**St. Clair Shores, Michigan**

Date Completed	: 4/20/2010	Boring Location	: Residential
Hole Diameter	: 2.5 inches		: [REDACTED] Bon Brae
Drilling Company	: EPA (Field Team)		: St. Clair Shores, Michigan
Drilling Method	: Geoprobe		
ECT Rep.	: John Kennedy		

ECT Project #10-0304



Environmental Consulting & Technology, Inc.

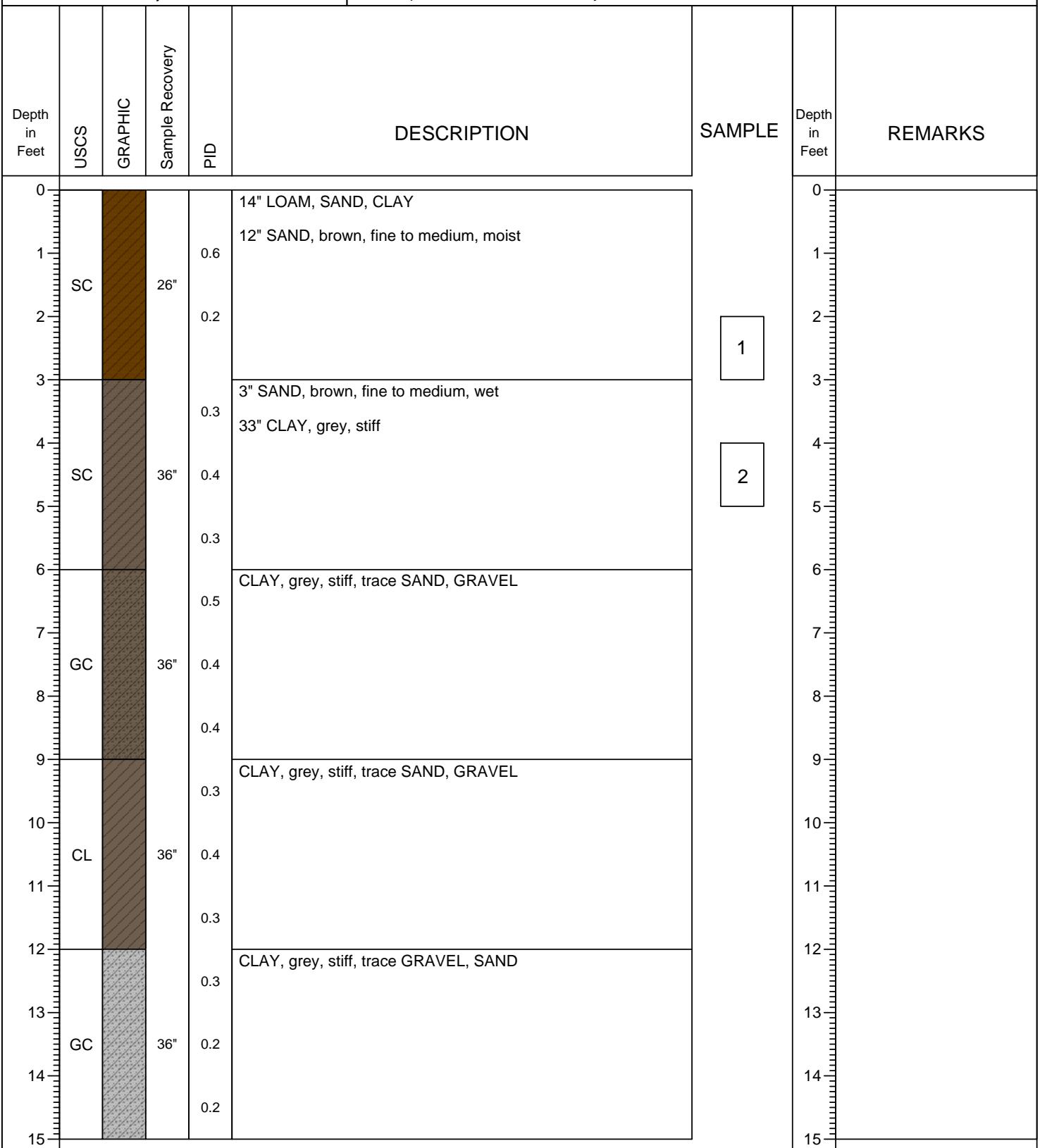
Bon Heur SB-01

St. Clair Shores Drain Site #2  
St. Clair Shores, Michigan

Date Completed : 4/19/2010  
Hole Diameter : 2.5 inches  
Drilling Company : EPA (Field Team)  
Drilling Method : Geoprobe  
ECT Rep. : John Kennedy

Boring Location : Residential  
: Bon Heur  
: St. Clair Shores, Michigan

ECT Project #10-0304





Environmental Consulting & Technology, Inc.

Bon Heur SB-02

St. Clair Shores Drain Site #2  
St. Clair Shores, Michigan

Date Completed : 4/19/2010  
Hole Diameter : 2.5 inches  
Drilling Company : EPA (Field Team)  
Drilling Method : Geoprobe  
ECT Rep. : John Kennedy

Boring Location : Residential  
: Bon Heur  
: St. Clair Shores, Michigan

ECT Project #10-0304

Depth in Feet	USCS	GRAPHIC	Sample Recovery	PID	DESCRIPTION	SAMPLE	Depth in Feet	REMARKS
0					LOAM, SAND, CLAY		0	
1	SC			13"	0.1		1	
2							2	
3					CLAY, brown, stiff, some SAND, wet		3	
4	CL			27"	0.1		4	
5					0.1		5	
6					CLAY, grey, stiff, trace SAND, GRAVEL		6	From 3 - 15', there was an apparent obstruction, preventing a full soil recovery for the cross-sectional area of the sample liner.
7	GC			36"	0.5		7	
8					0.2		8	
9					0.3		9	
10					0.4		10	
11	CL			33"	0.3		11	
12					0.3		12	
13					0.2		13	
14	GC			31"	0.3		14	
15					0.3		15	



Environmental Consulting & Technology, Inc.

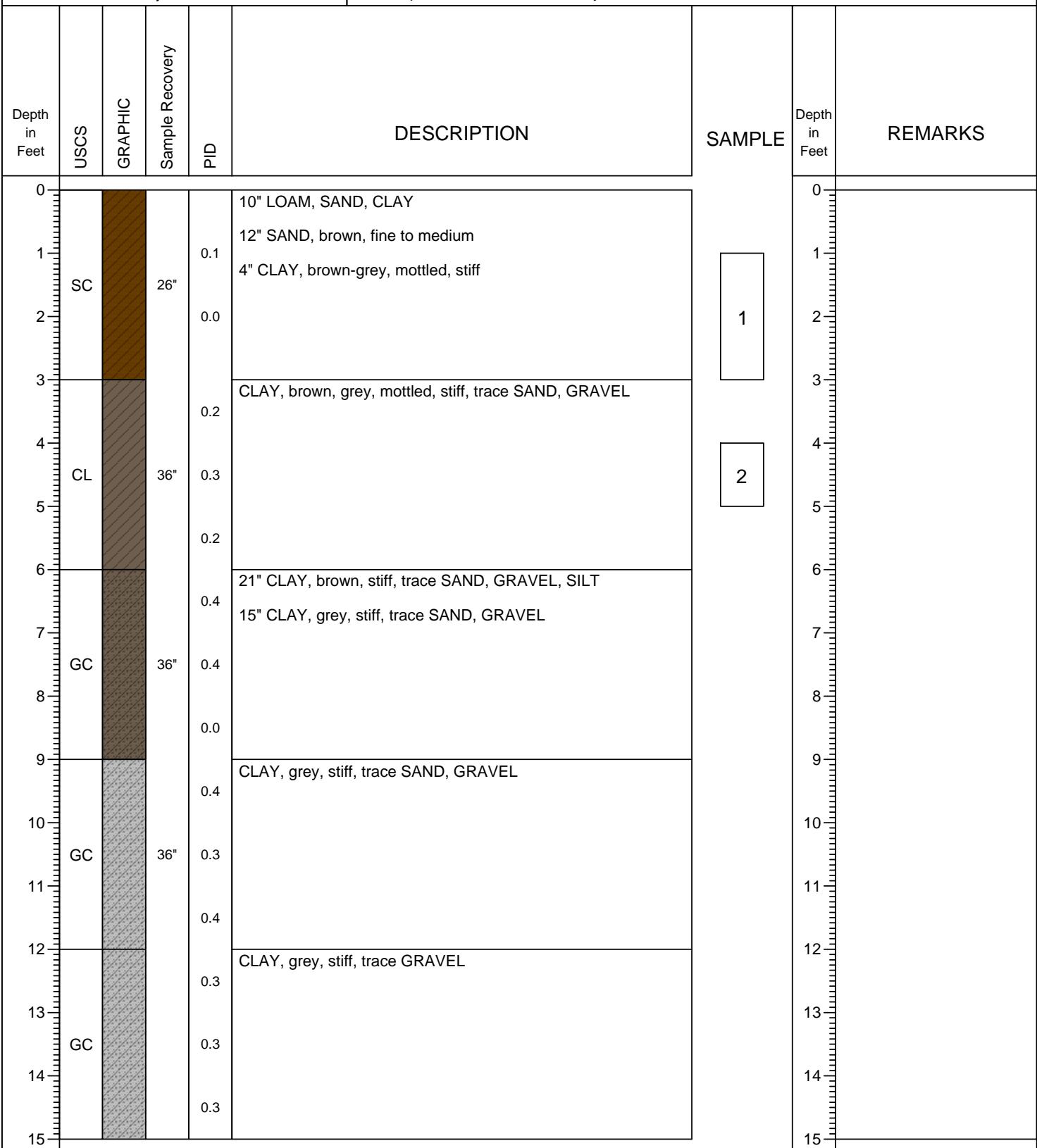
Bon Heur SB-03

St. Clair Shores Drain Site #2  
St. Clair Shores, Michigan

Date Completed : 4/19/2010  
Hole Diameter : 2.5 inches  
Drilling Company : EPA (Field Team)  
Drilling Method : Geoprobe  
ECT Rep. : John Kennedy

Boring Location : Residential  
: Bon Heur  
: St. Clair Shores, Michigan

ECT Project #10-0304





Environmental Consulting & Technology, Inc.

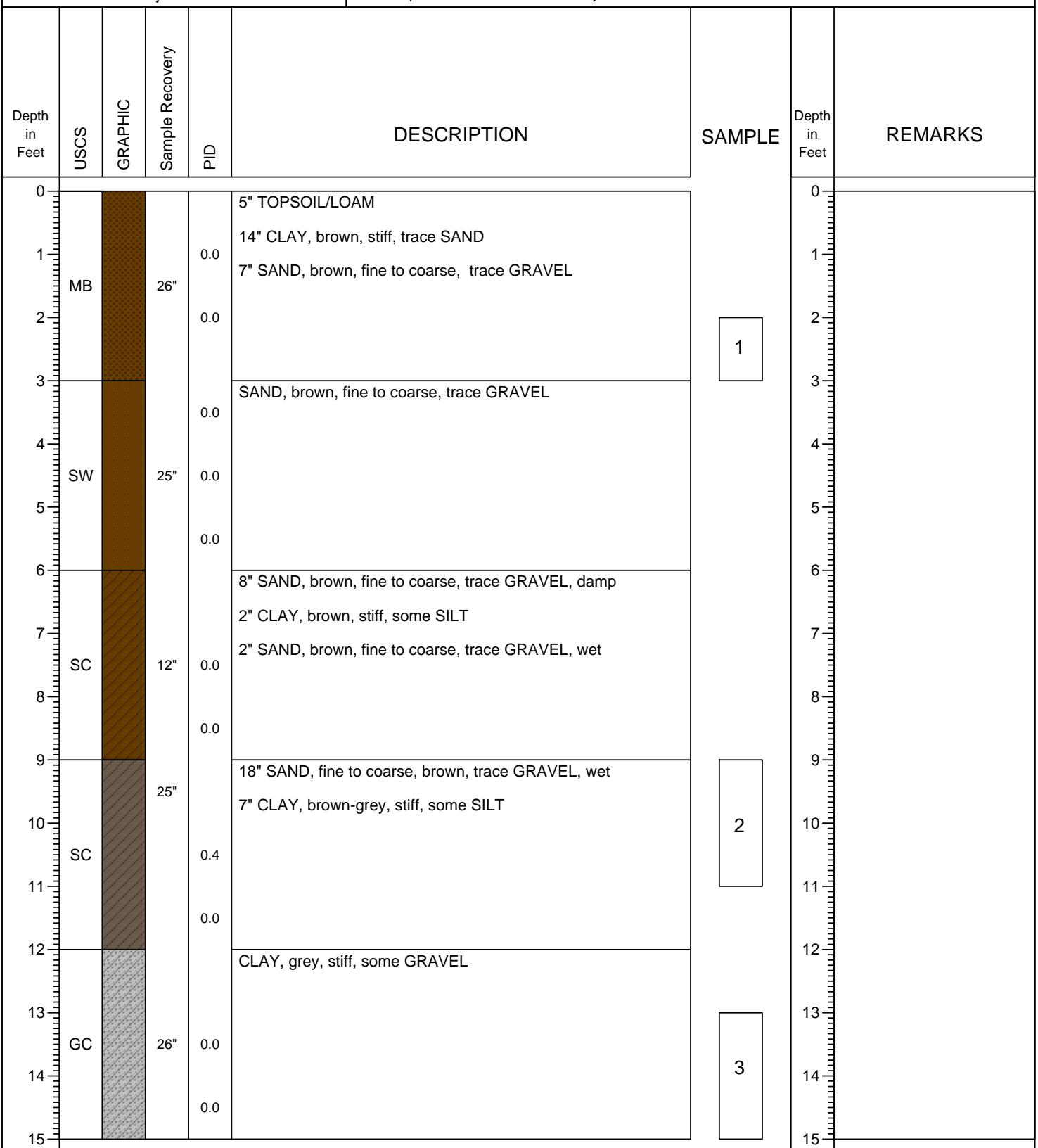
[REDACTED] Harper SB-01

St. Clair Shores Drain Site #2  
St. Clair Shores, Michigan

Date Completed : 4/16/2010  
Hole Diameter : 2.5 inches  
Drilling Company : EPA (Field Team)  
Drilling Method : Geoprobe  
ECT Rep. : John Kennedy

Boring Location : Right-of-Way  
: [REDACTED] Harper  
: St. Clair Shores, Michigan

ECT Project #10-0304





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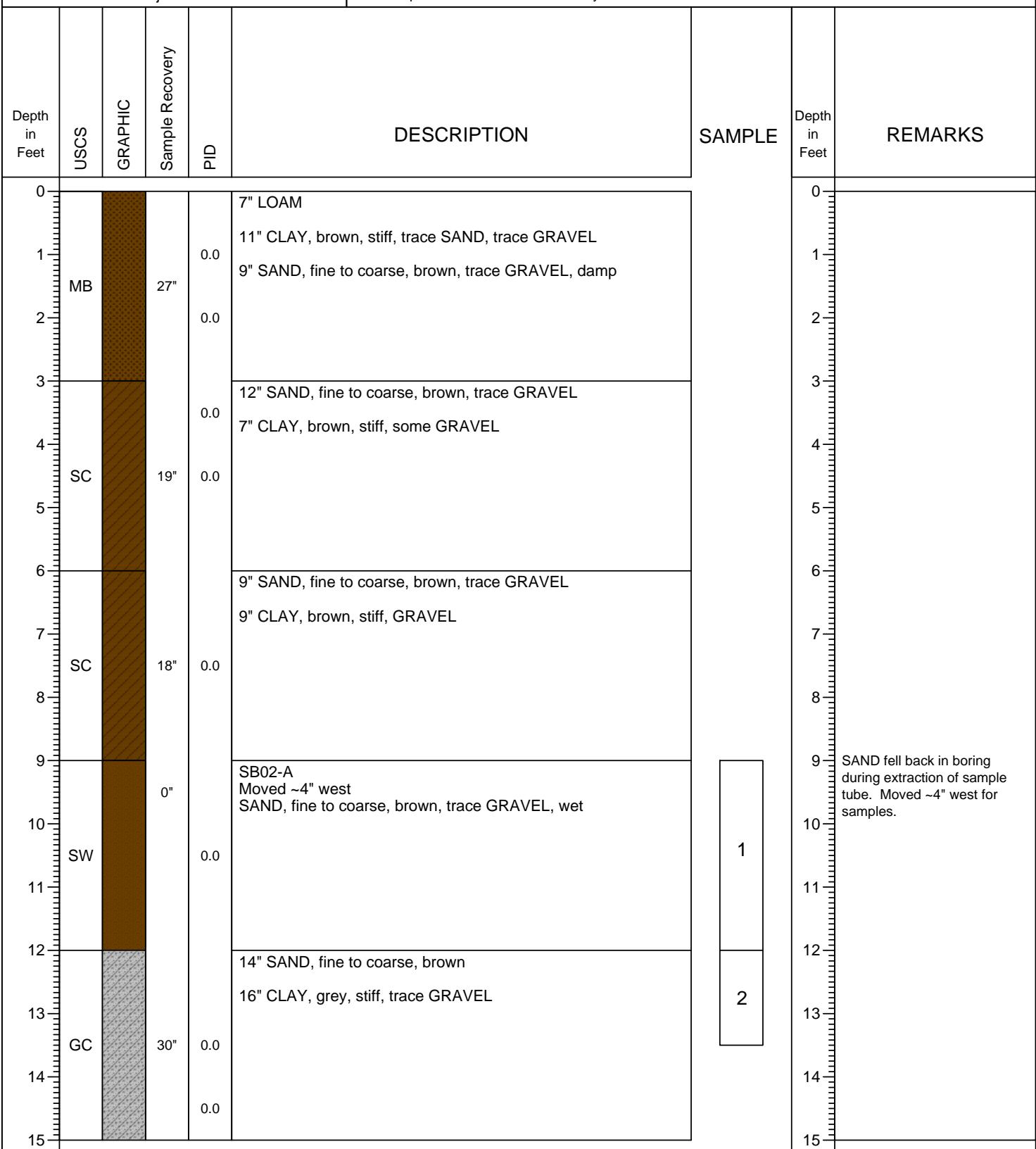
██████████ Harper SB-02

St. Clair Shores Drain Site #2  
St. Clair Shores, Michigan

Date Completed : 4/16/2010  
Hole Diameter : 2.5 inches  
Drilling Company : EPA (Field Team)  
Drilling Method : Geoprobe  
ECT Rep. : John Kennedy

Boring Location : Right-of-Way  
: ██████████ Harper  
: St. Clair Shores, Michigan

ECT Project #10-0304





## ***Environmental Consulting & Technology, Inc.***

Harper SB-03

St. Clair Shores Drain Site #2  
St. Clair Shores, Michigan

Date Completed : 4/16/2010 Boring Location : Commercial  
Hole Diameter : 2.5 inches : [REDACTED] Harper  
Drilling Company : EPA (Field Team) : St. Clair Shores, Michigan  
Drilling Method : Geoprobe  
ECT Rep. : John Kennedy

ECT Project #10-0304

Depth in Feet	USCS	GRAPHIC	Sample Recovery	PID	DESCRIPTION	SAMPLE	Depth in Feet	REMARKS
0							0	
1	CS		28"	0.0	7" LOAM 9" CLAY, SILT, dark grEy, mottled, stiff 12" CLAY, brown, grey, orange, stiff	1	1	
2				0.0			2	
3				0.0	CLAY, brown, grey, orange, stiff		3	
4	SC			0.0	some SAND 3-4.5'		4	
5				0.0	SAND, CLAY, 4.5'		5	
6				0.0	little SAND 4.5-6'		6	
7	CL			0.0	CLAY, brown, stiff		7	
8				0.0			8	
9			36"	0.0	30" CLAY, brown, stiff, trace SAND 6" CLAY, grey, stiff, trace GRAVEL		9	
10	CL			0.0			10	
11				0.0			11	
12				0.0	CLAY, grey, stiff, trace GRAVEL		12	
13	GC		36"	0.0			13	
14				0.0			14	
15					EOB - Refusal		15	



## ***Environmental Consulting & Technology, Inc.***

Harper SB-04

St. Clair Shores Drain Site #2  
St. Clair Shores, Michigan

Date Completed	: 4/16/2010	Boring Location	: Commercial
Hole Diameter	: 2.5 inches		: [REDACTED] Harper
Drilling Company	: EPA (Field Team)		: St. Clair Shores, Michigan
Drilling Method	: Geoprobe		
ECT Rep.	: John Kennedy		

ECT Project #10-0304

Depth in Feet	USCS	GRAPHIC	Sample Recovery	PID	DESCRIPTION	SAMPLE	Depth in Feet	REMARKS
0							0	
1	CL		18"	0.0	4" LOAM 10" CLAY, brown, tan, stiff, some SAND 4" Roots, organic peat-like	1	1	
2				1.2			2	
3	CL		36"	0.9	CLAY, brown, grey, stiff, trace SAND		3	
4				0.0			4	
5	CL		36"	0.0			5	
6				0.0	CLAY, brown, gray, stiff, trace SAND, GRAVEL	2	6	
7				0.0			7	
8	GC		36"	0.0			8	
9				0.0	31" CLAY, brown, stiff, trace SILT, SAND, GRAVEL		9	
10				0.0	5" CLAY, grey, stiff, trace GRAVEL		10	
11	CL		36"	0.0			11	
12				0.0	CLAY, grey, stiff, trace GRAVEL, SAND		12	
13				0.0			13	
14	GC		36"	0.0			14	
15				0.0			15	



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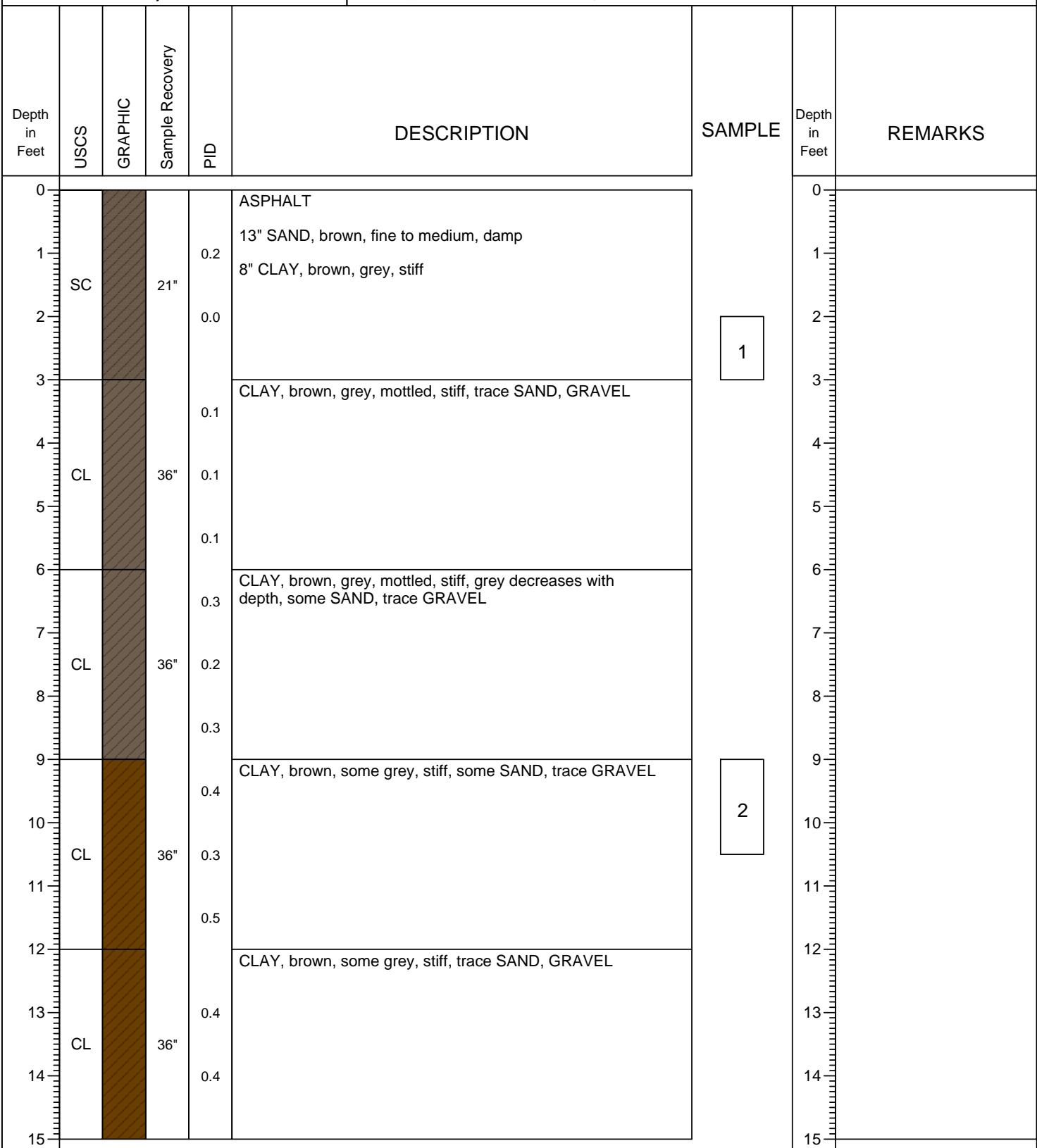
[REDACTED] Harper SB-05

St. Clair Shores Drain Site #2  
St. Clair Shores, Michigan

Date Completed : 4/13/2010  
Hole Diameter : 2.5 inches  
Drilling Company : EPA (Field Team)  
Drilling Method : Geoprobe  
ECT Rep. : John Kennedy

Boring Location : Commercial Property  
: [REDACTED] Harper  
: St. Clair Shores, Michigan

ECT Project #10-0304





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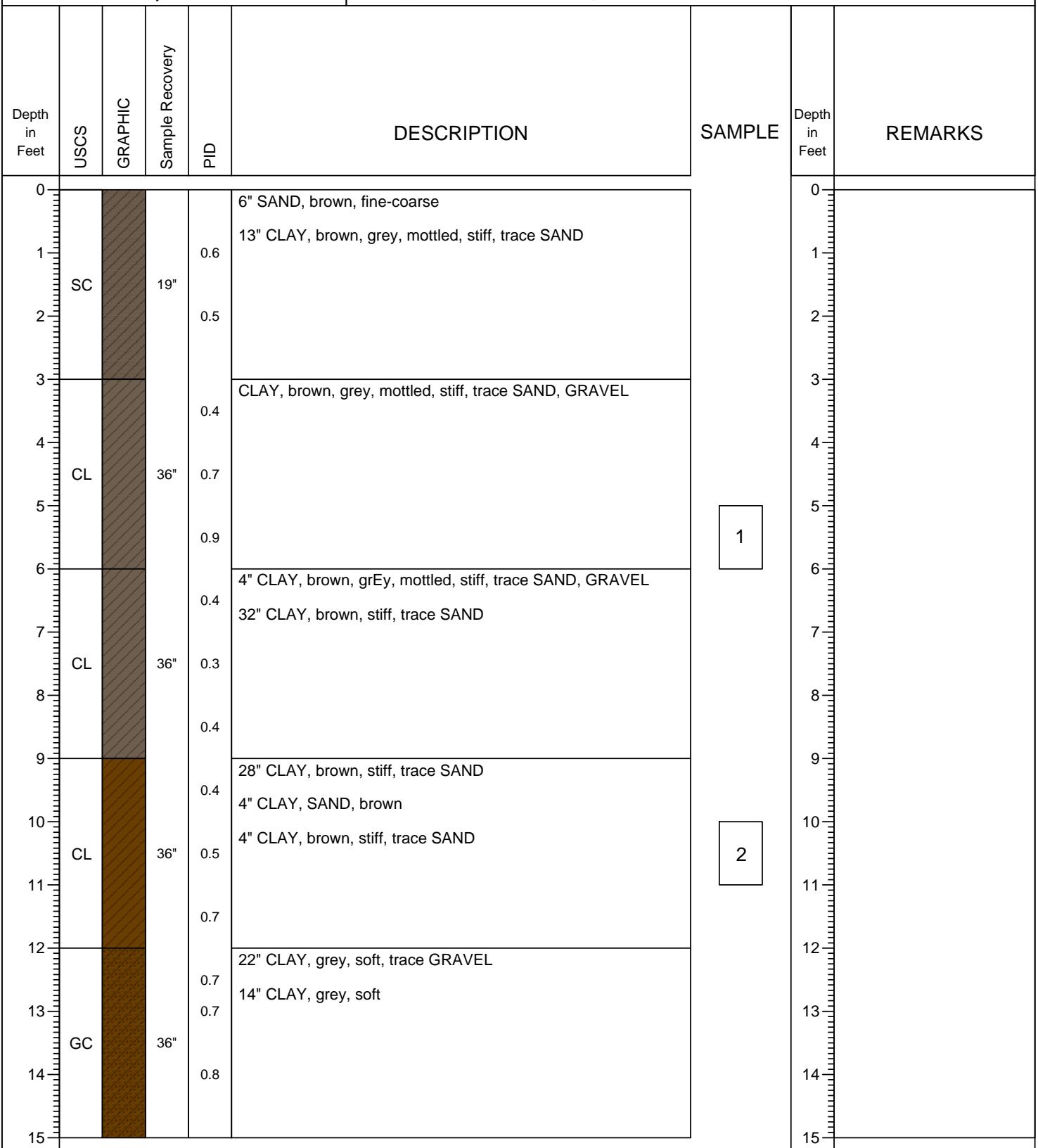
██████████ Harper SB-06

St. Clair Shores Drain Site #2  
St. Clair Shores, Michigan

Date Completed : 4/21/2010  
Hole Diameter : 2.5 inches  
Drilling Company : EPA (Field Team)  
Drilling Method : Geoprobe  
ECT Rep. : John Kennedy

Boring Location : Commercial  
: ██████████ Harper  
: St. Clair Shores, Michigan

ECT Project #10-0304





## ***Environmental Consulting & Technology, Inc.***

Harper SB-07

St. Clair Shores Drain Site #2  
St. Clair Shores, Michigan

Date Completed : 4/21/2010  
Hole Diameter : 2.5 inches  
Drilling Company : EPA (Field Team)  
Drilling Method : Geoprobe  
ECT Rep. : John Kennedy

Boring Location : Right-of-Way  
: [REDACTED] Harper  
: St. Clair Shores, Michigan

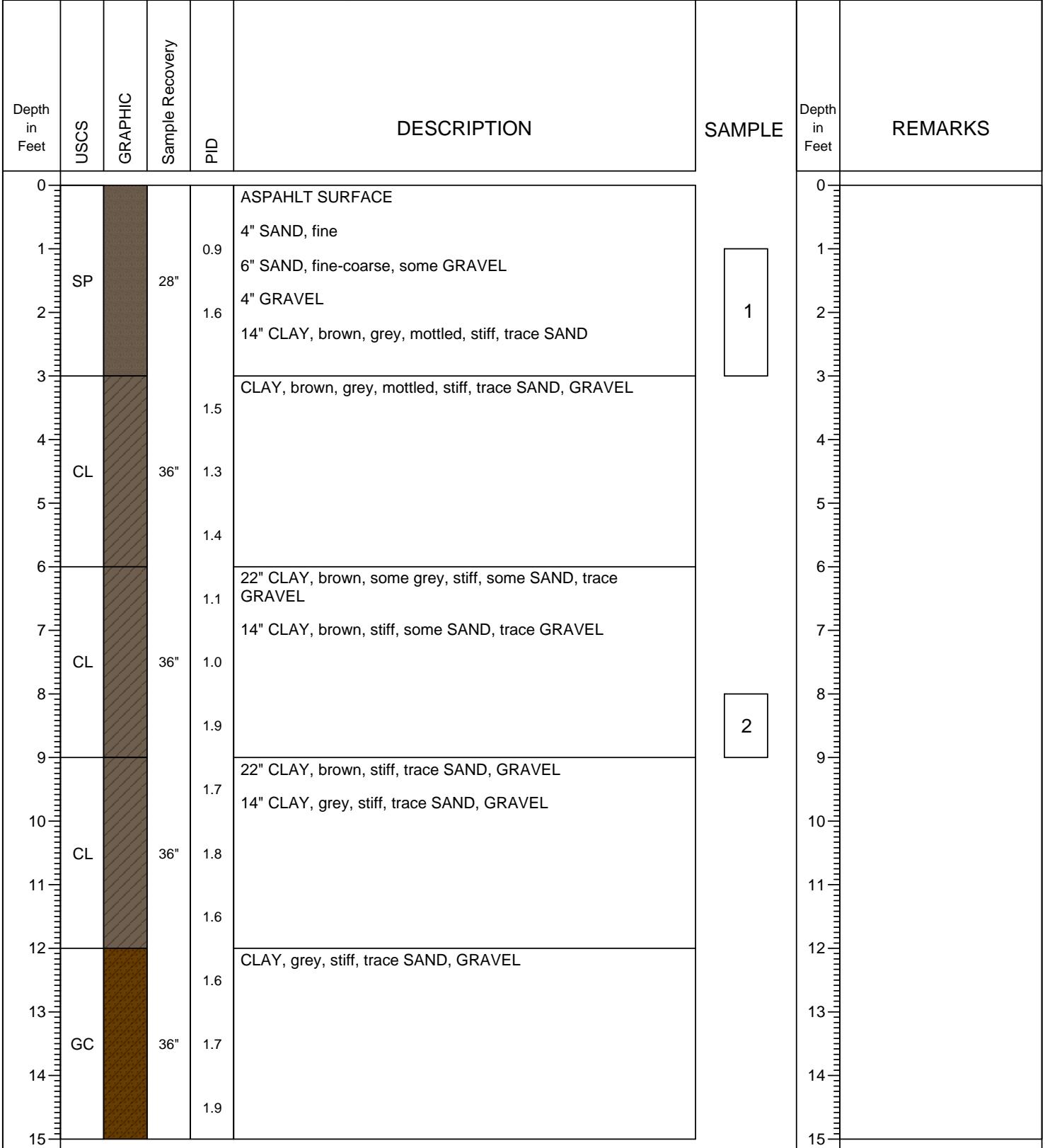
ECT Project #10-0304



## ***Environmental Consulting & Technology, Inc.***

Harper SB-08

St. Clair Shores Drain Site #2 St. Clair Shores, Michigan	Date Completed : 4/21/2010	Boring Location : Commercial
	Hole Diameter : 2.5 inches	: [REDACTED] Harper
	Drilling Company : EPA (Field Team)	: St. Clair Shores, Michigan
	Drilling Method : Geoprobe	
ECT Project #10-0304	ECT Rep. : John Kennedy	





Environmental Consulting & Technology, Inc.

[REDACTED] Harper SB-01

St. Clair Shores Drain Site #2  
St. Clair Shores, Michigan

Date Completed : 4/13/2010  
Hole Diameter : 2.5 inches  
Drilling Company : EPA (Field Team)  
Drilling Method : Geoprobe  
ECT Rep. : John Kennedy

Boring Location : Commercial Property  
: [REDACTED] Harper  
: St. Clair Shores, Michigan

ECT Project #10-0304

Depth in Feet	USCS	GRAPHIC	Sample Recovery	PID	DESCRIPTION		REMARKS
0					ASPHALT, No recovery, Fill, Gravel, asphalt, damp		
1	CL						
2							
3	SW			0"			Rock
4	CL			5"	SAND, fine to coarse, dark brown, and CLAY, some GRAVEL, damp		
5	CL			-29"	CLAY, brown and grey, stiff, trace SAND, damp		
6	CL			34"	CLAY, brown and grey, stiff, some SILT, trace GRAVEL, damp		Sandy seam at 6-7', trace Gravel, damp
7	CL				CLAY, brown, stiff, some SILT, damp		
8	CL			33"			
9	CL				CLAY, brown, stiff, trace SAND, trace GRAVEL, damp		
10	CL			37"	CLAY, brown, stiff, trace SAND, GRAVEL, damp		
11	CL				CLAY, brown, stiff, trace SILT, trace SAND		
12	CL				CLAY, brown, stiff, some GRAVEL, some SAND		
13	CL				CLAY, brown-grey, stiff, trace SAND, SILT, GRAVEL		
14	CL						
15							



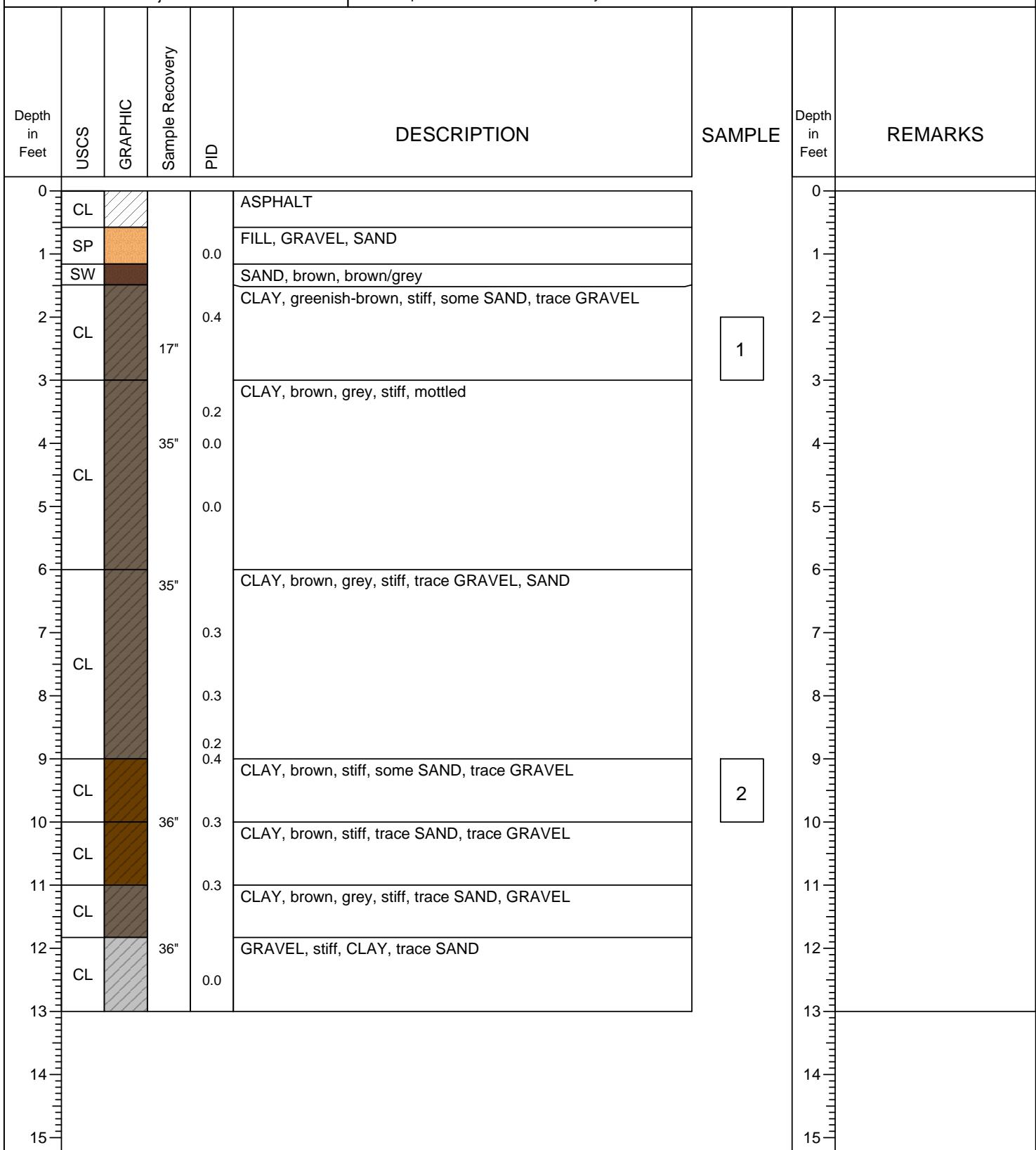
Environmental Consulting & Technology, Inc.

██████████ Harper SB-02

St. Clair Shores Drain Site #2  
St. Clair Shores, Michigan

Date Completed : 4/13/2010  
Hole Diameter : 2.5 inches  
Drilling Company : EPA (Field Team)  
Drilling Method : Geoprobe  
ECT Rep. : John Kennedy

ECT Project #10-0304





*Environmental Consulting & Technology, Inc.*

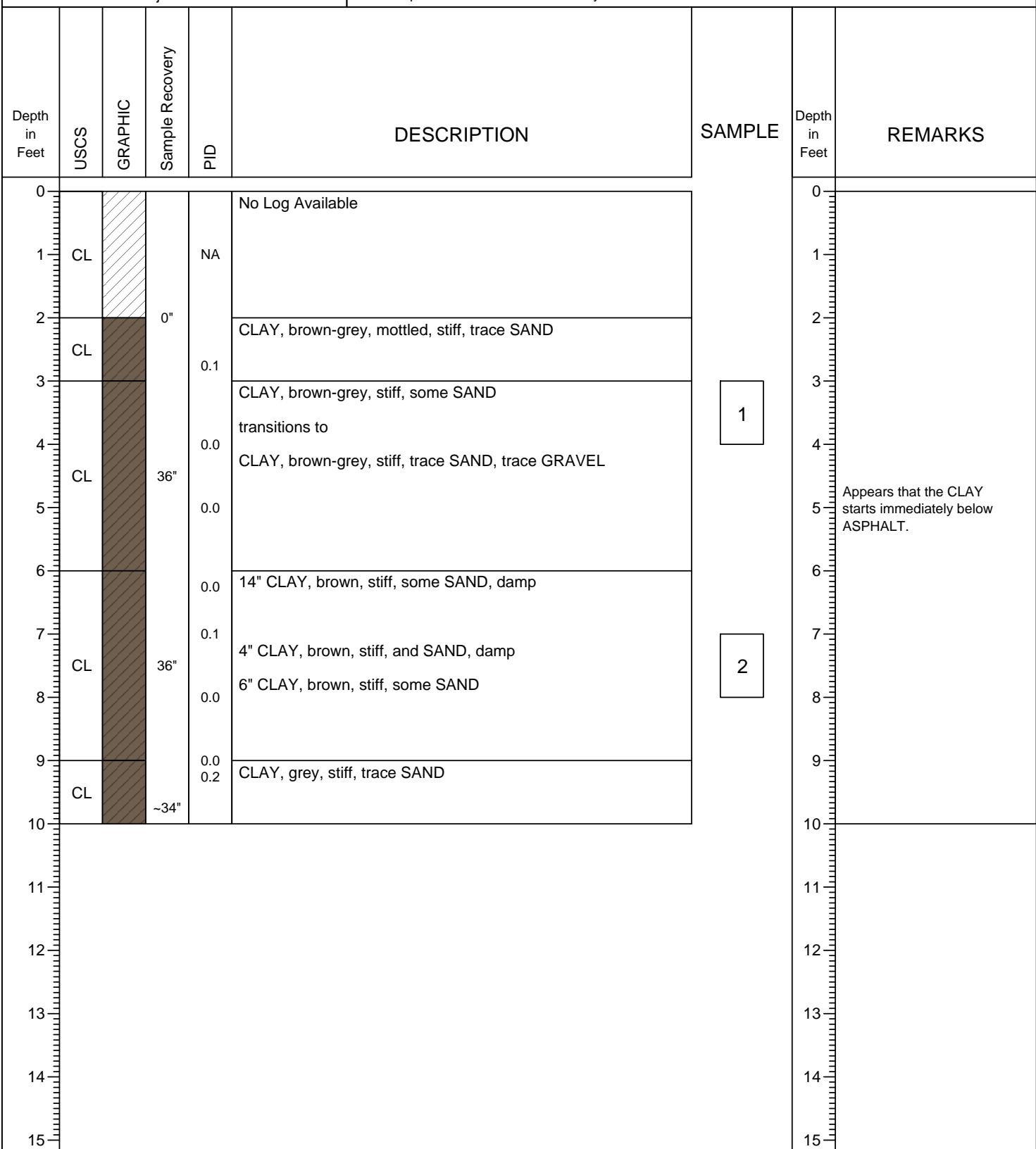
██████████ Harper SB-03

St. Clair Shores Drain Site #2  
St. Clair Shores, Michigan

Date Completed : 4/13/2010  
Hole Diameter : 2.5 inches  
Drilling Company : EPA (Field Team)  
Drilling Method : Geoprobe  
ECT Rep. : John Kennedy

ECT Project #10-0304

Boring Location : Commercial Property  
: ██████████ Harper  
: St. Clair Shores, Michigan





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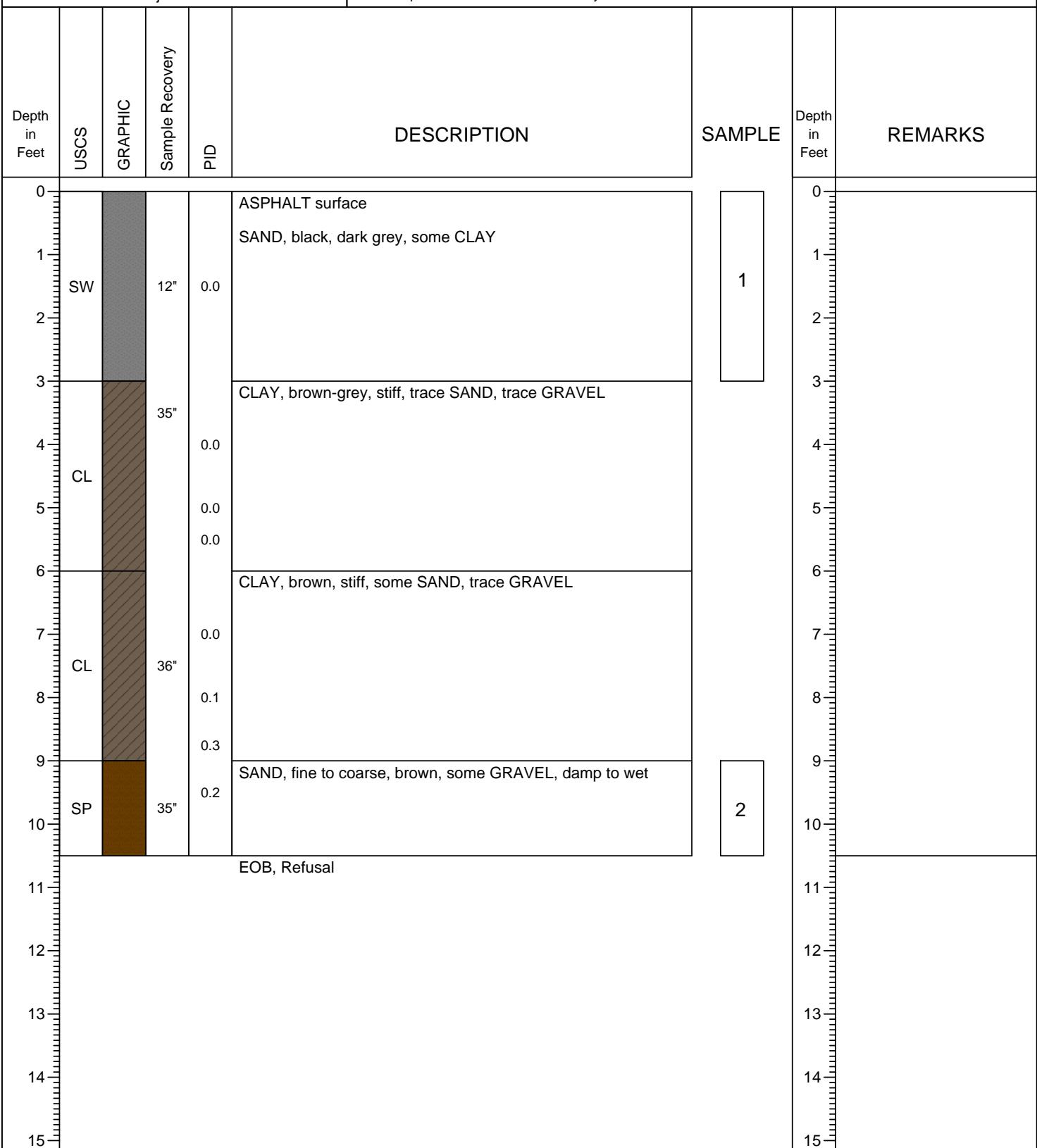
██████████ Harper SB-04

St. Clair Shores Drain Site #2  
St. Clair Shores, Michigan

Date Completed : 4/13/2010  
Hole Diameter : 2.5 inches  
Drilling Company : EPA (Field Team)  
Drilling Method : Geoprobe  
ECT Rep. : John Kennedy

: Commercial Property  
: ██████████ Harper  
: St. Clair Shores, Michigan

ECT Project #10-0304





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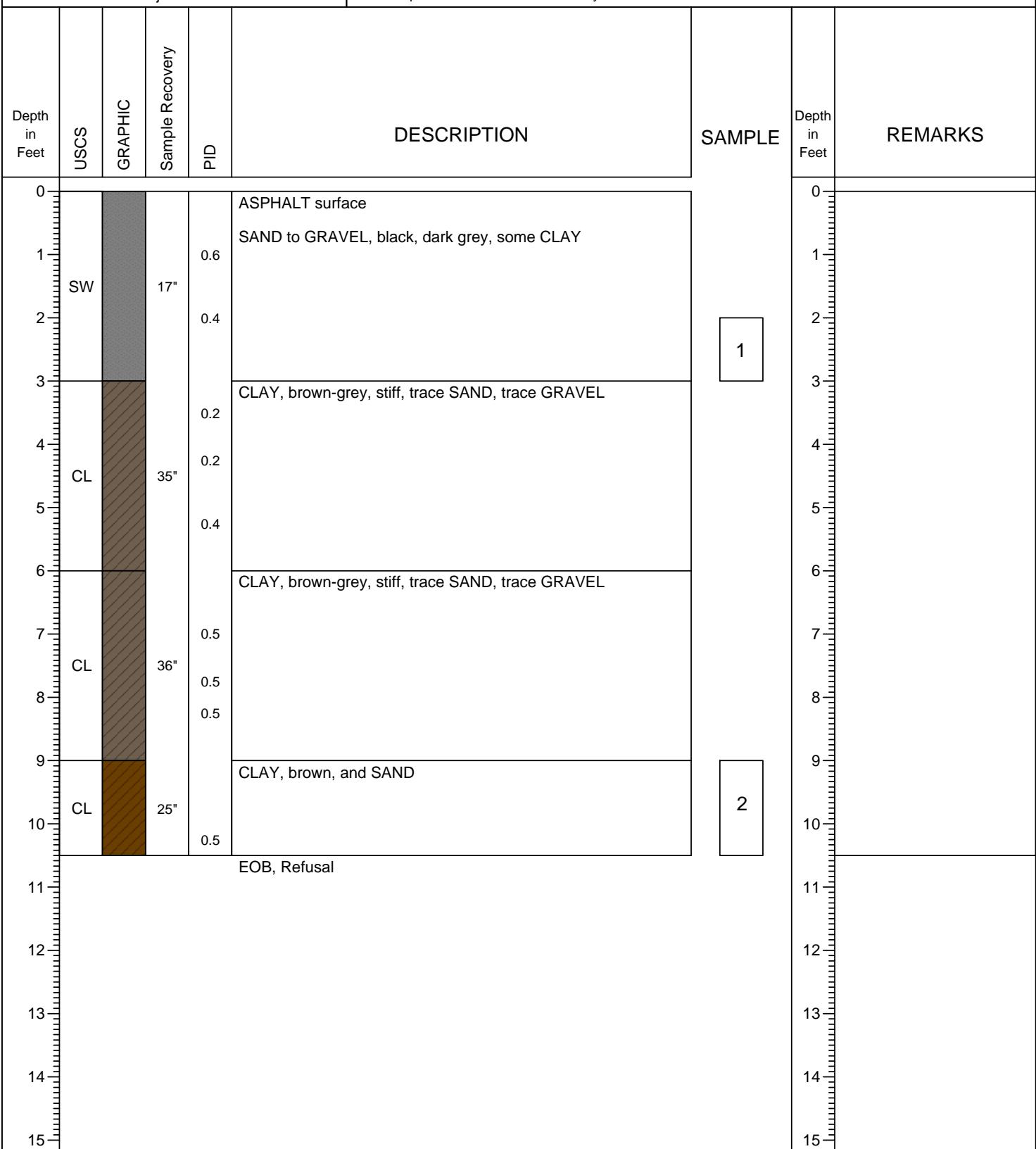
██████████ Harper SB-05

St. Clair Shores Drain Site #2  
St. Clair Shores, Michigan

Date Completed : 4/13/2010  
Hole Diameter : 2.5 inches  
Drilling Company : EPA (Field Team)  
Drilling Method : Geoprobe  
ECT Rep. : John Kennedy

Boring Location : Commercial Property  
: ██████████ Harper  
: St. Clair Shores, Michigan

ECT Project #10-0304





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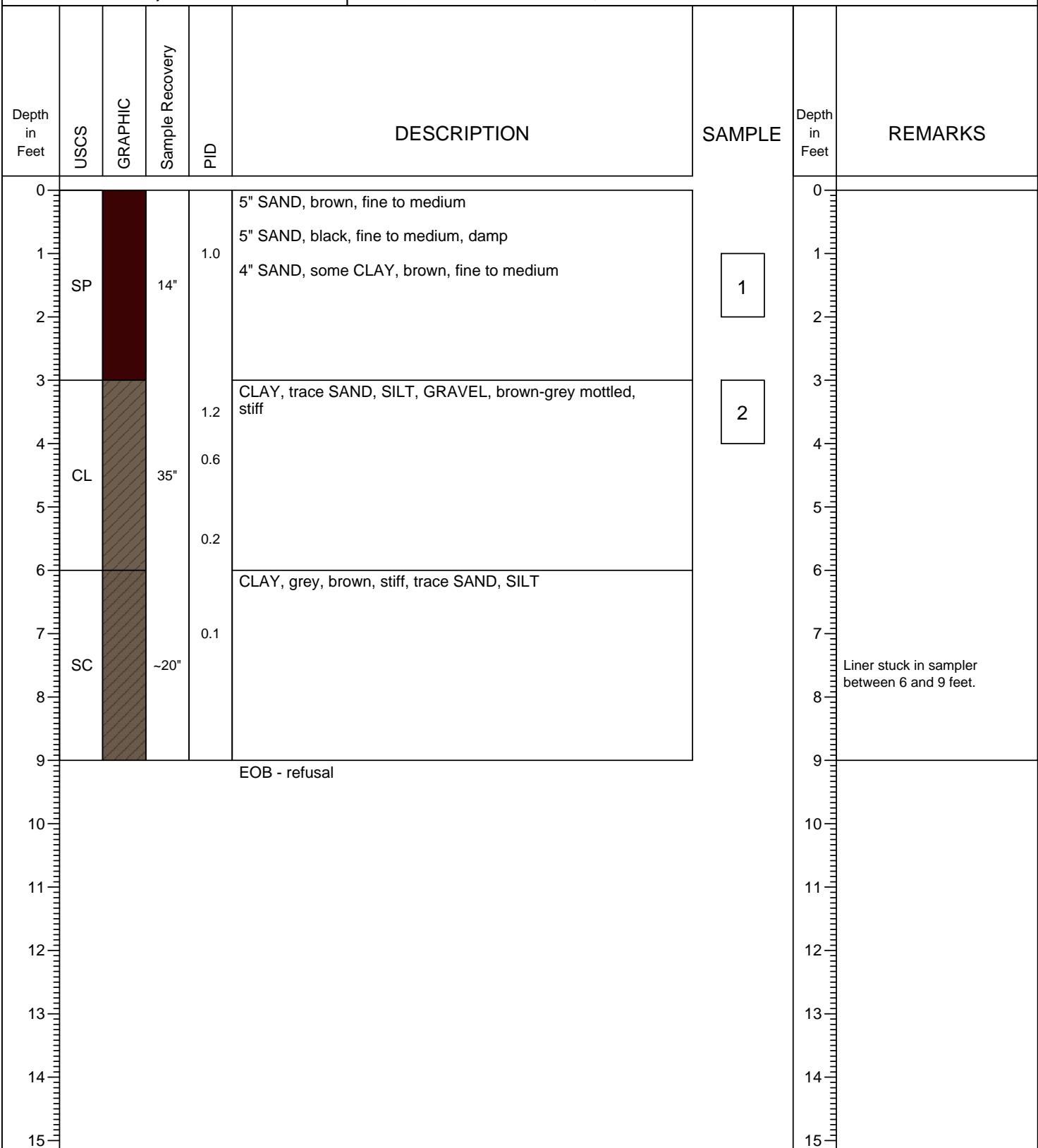
██████████ Harper SB-06

St. Clair Shores Drain Site #2  
St. Clair Shores, Michigan

Date Completed : 4/14/2010  
Hole Diameter : 2.5 inches  
Drilling Company : EPA (Field Team)  
Drilling Method : Geoprobe  
ECT Rep. : John Kennedy

Boring Location : Right-of-Way  
: ██████████ Bon Brae  
: St. Clair Shores, Michigan

ECT Project #10-0304





## ***Environmental Consulting & Technology, Inc.***

## Harper SB-01

**St. Clair Shores Drain Site #2**  
**St. Clair Shores, Michigan**

Date Completed	: 4/15/2010	Boring Location	: Commercial
Hole Diameter	: 2.5 inches		: [REDACTED] Harper
Drilling Company	: EPA (Field Team)		: St. Clair Shores, Michigan
Drilling Method	: Geoprobe		
ECT Rep.	: John Kennedy		

ECT Project #10-0304



Environmental Consulting & Technology, Inc.

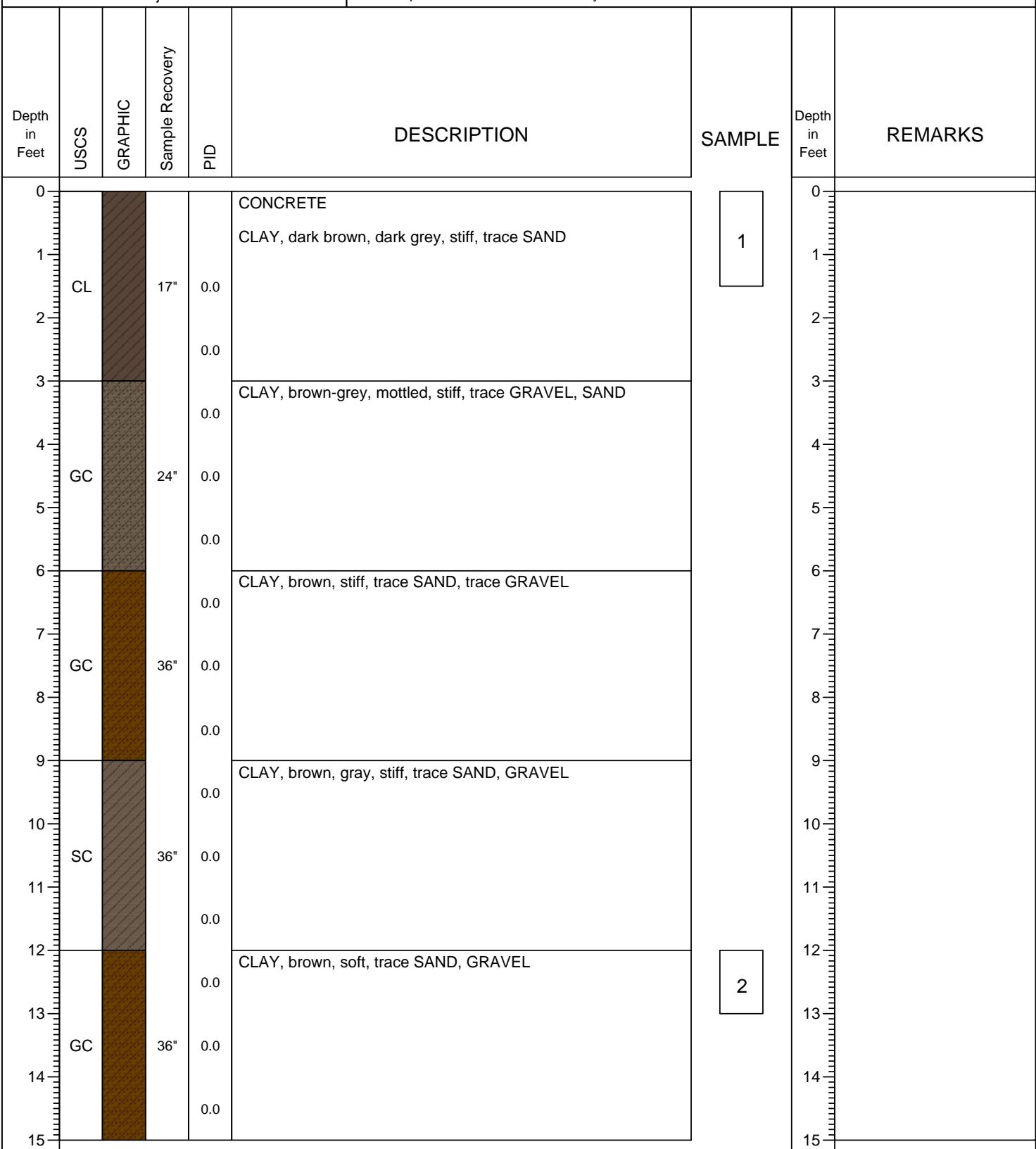
██████████ Harper SB-02

St. Clair Shores Drain Site #2  
St. Clair Shores, Michigan

Date Completed : 4/15/2010  
Hole Diameter : 2.5 inches  
Drilling Company : EPA (Field Team)  
Drilling Method : Geoprobe  
ECT Rep. : John Kennedy

Boring Location : Commercial  
: ██████████ Harper  
: St. Clair Shores, Michigan

ECT Project #10-0304





Environmental Consulting & Technology, Inc.

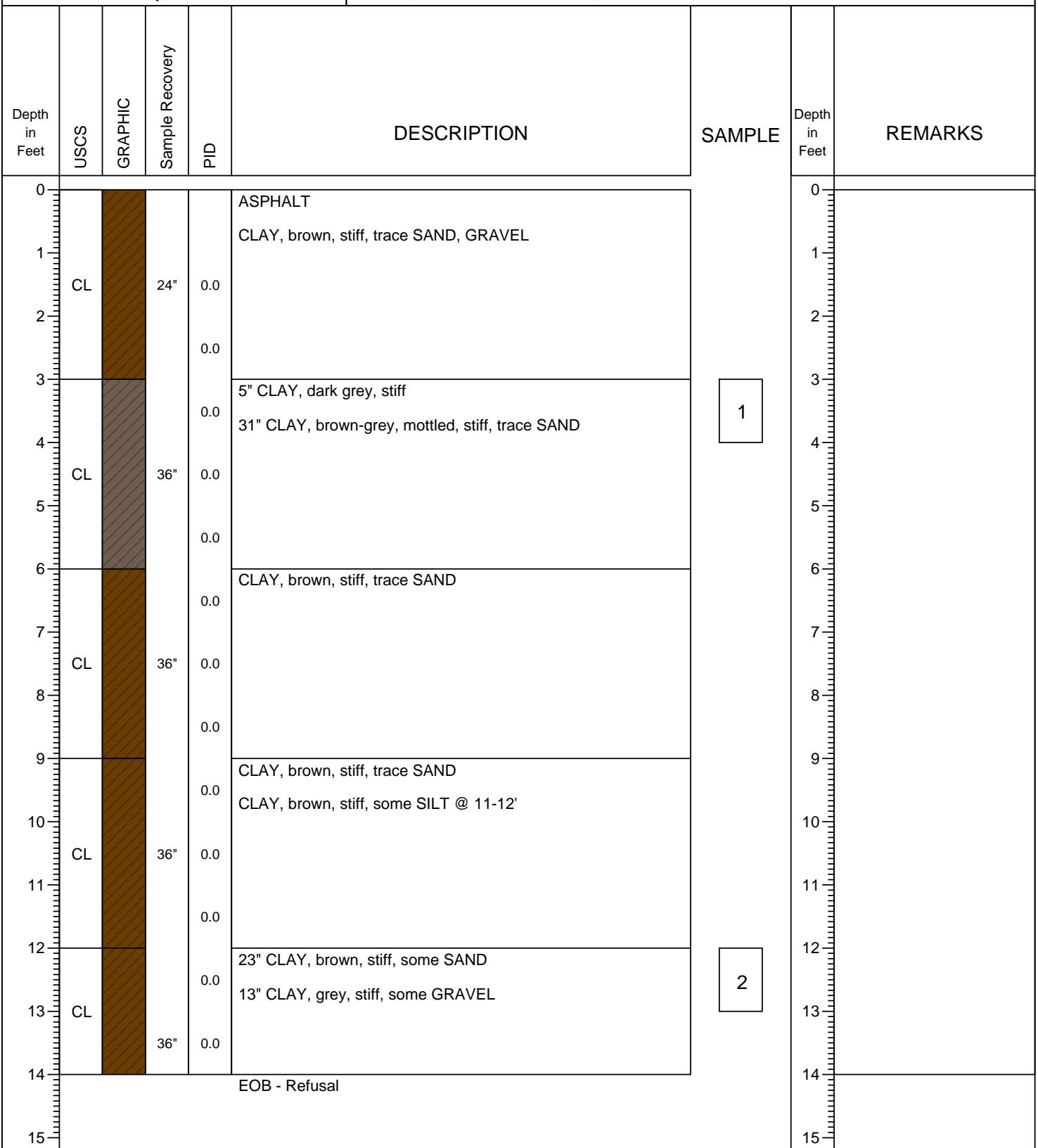
██████████ Harper SB-03

St. Clair Shores Drain Site #2  
St. Clair Shores, Michigan

Date Completed : 4/15/2010  
Hole Diameter : 2.5 inches  
Drilling Company : EPA (Field Team)  
Drilling Method : Geoprobe  
ECT Rep. : John Kennedy

Boring Location : Commercial  
: ██████████ Harper  
: St. Clair Shores, Michigan

ECT Project #10-0304





## ***Environmental Consulting & Technology, Inc.***

Harper SB-04

St. Clair Shores Drain Site #2  
St. Clair Shores, Michigan

Date Completed	: 4/15/2010	Boring Location	: Commercial
Hole Diameter	: 2.5 inches		: [REDACTED] Harper
Drilling Company	: EPA (Field Team)		: St. Clair Shores, Michigan
Drilling Method	: Geoprobe		
ECT Rep.	: John Kennedy		

ECT Project #10-0304

Depth in Feet	USCS	GRAPHIC	Sample Recovery	PID	DESCRIPTION	SAMPLE	Depth in Feet	REMARKS
0					ASPHALT		0	
1					CLAY, dark grey, stiff, some SAND, some SILT		1	
2							2	
3	CL		23"	0.0	0.0		3	
4					6" CLAY, brown, grey, dark grey, mottled, stiff, trace SAND		4	
5					30" CLAY, brown-grey, mottled, stiff, trace SAND		5	
6	CL		36"	0.0	0.0		6	
7					CLAY, brown, grey, stiff, mottled, trace SAND		7	
8					Thin seam SAND @ ~7.5'		8	
9	CL		36"	0.0	0.0		9	
10					CLAY, brown, stiff, trace SAND		10	
11					some GRAVEL @ ~10'		11	
12	CL		36"	0.0	0.0		12	
13					25" CLAY, brown, grey, stiff, some GRAVEL		13	
14					11" CLAY, grey, soft, some GRAVEL		14	
15	CL		36"	0.0	0.0		15	



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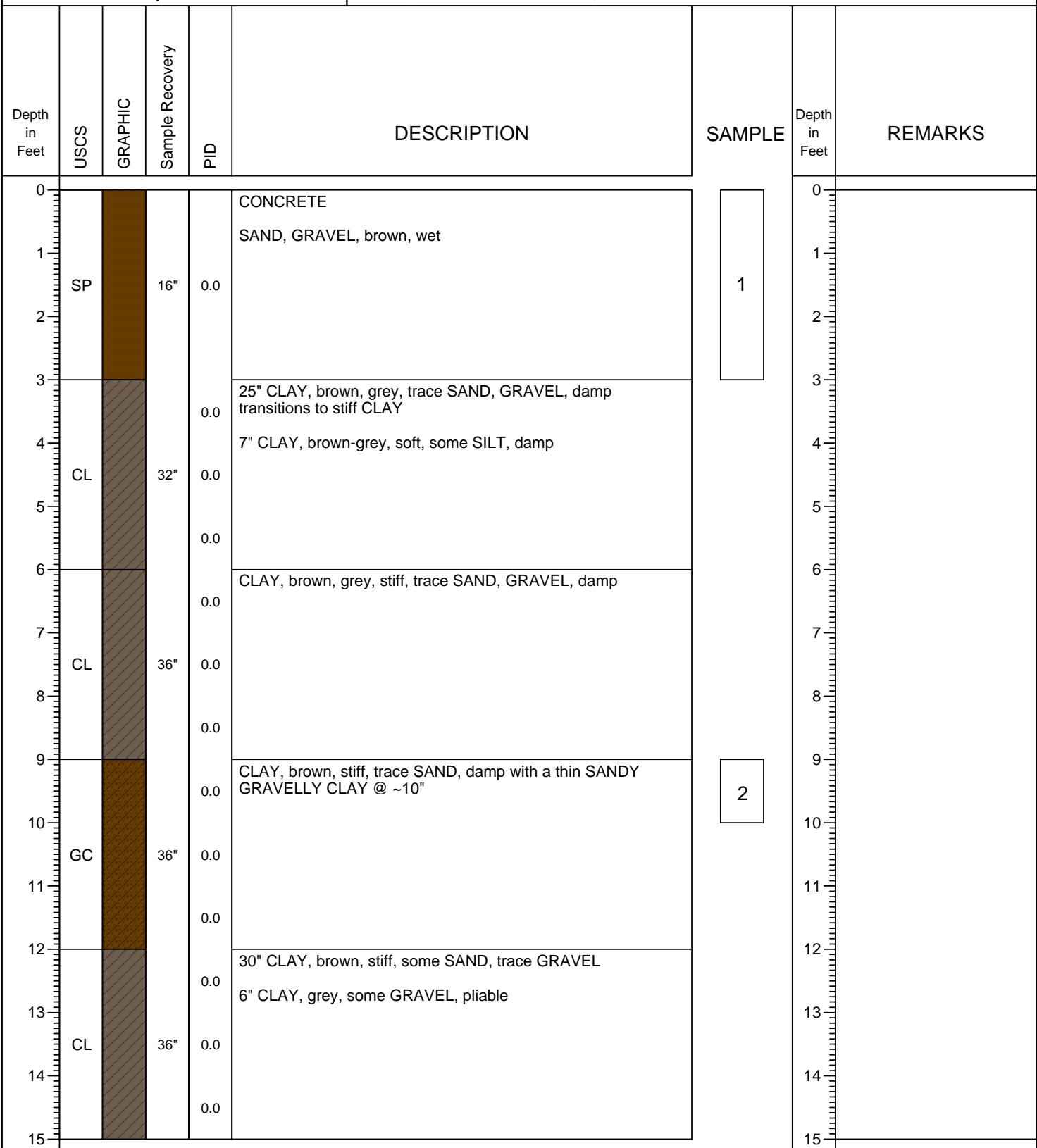
██████████ Harper SB-05

St. Clair Shores Drain Site #2  
St. Clair Shores, Michigan

Date Completed : 4/15/2010  
Hole Diameter : 2.5 inches  
Drilling Company : EPA (Field Team)  
Drilling Method : Geoprobe  
ECT Rep. : John Kennedy

Boring Location : Commercial  
: ██████████ Harper  
: St. Clair Shores, Michigan

ECT Project #10-0304





## ***Environmental Consulting & Technology, Inc.***

Harper SB-06

**St. Clair Shores Drain Site #2**  
**St. Clair Shores, Michigan**

Date Completed	: 4/15/2010	Boring Location	: Commercial
Hole Diameter	: 2.5 inches		: [REDACTED] Harper
Drilling Company	: EPA (Field Team)		: St. Clair Shores, Michigan
Drilling Method	: Geoprobe		
ECT Rep.	: John Kennedy		

ECT Project #10-0304

Depth in Feet	USCS	GRAPHIC	Sample Recovery	PID	DESCRIPTION	SAMPLE	Depth in Feet	REMARKS
0					CLAY, brown, some dark grey, stiff, some SAND, trace GRAVEL		0	
1	CL		17"	0.0			1	
2					3" CLAY, brown, some dark grey, stiff	1	1	
3					5" CLAY, grey, dark grey, soft		2	
4	CL		36"	0.0	28" CLAY, brown, grey, mottled, stiff, trace SAND		3	
5							4	
6					CLAY, brown, grey, mottled, stiff, trace SAND		5	
7	CL		36"	0.0			6	
8							7	
9					6" CLAY, brown, dark grey, grey, soft, and SAND, trace GRAVEL	1	8	
10	GC		36"	0.0	30" CLAY, brown, stiff, trace SAND, SILT, GRAVEL	2	9	Water gushed through rods as if a water line had been hit.
11							10	
12					6" CLAY, brown, stiff, trace SAND, SILT, GRAVEL		11	
13	GC		36"	0.0	3" GRAVELLY, SANDY CLAY, brown, damp		12	
14					18" CLAY, brown, stiff, trace SAND, SILT, GRAVEL		13	
15					9" CLAY, grey, some GRAVEL, soft		14	



Environmental Consulting & Technology, Inc.

██████████ Harper SB-07

St. Clair Shores Drain Site #2  
St. Clair Shores, Michigan

Date Completed : 4/15/2010  
Hole Diameter : 2.5 inches  
Drilling Company : EPA (Field Team)  
Drilling Method : Geoprobe  
ECT Rep. : John Kennedy

Boring Location : Commercial  
: ██████████ Harper  
: St. Clair Shores, Michigan

ECT Project #10-0304

Depth in Feet	USCS	GRAPHIC	Sample Recovery	PID	DESCRIPTION	SAMPLE	Depth in Feet	REMARKS
0					9" SAND, GRAVEL, brown, moist		0	
1	GC	██████████	23"		10" CLAY, grey, stiff, trace SAND, SILT		1	
2					4" CLAY, black, dark grey, stiff		2	
3					15" CLAY, grey, dark grey, soft		3	
4					6" CLAY, brown, grey, mottled, stiff, trace SAND, SILT			
5	CL	██████████	21"					
6					CLAY, brown, stiff, trace SAND, SILT, GRAVEL			
7	CL	██████████	29"					
8								
9	SC	██████████	36"		CLAY, brown, stiff, trace SAND, SILT, GRAVEL			
10								
11								
12	GC	██████████	30"		6" CLAY, brown, some grey, some SILT, some GRAVEL			
13					2" SANDY CLAY			
14					16" CLAY, some grey, some SILT, some GRAVEL			
15					2" SANDY CLAY, brown			
					4" CLAY, brown, grey, stiff, trace SILT, SAND			



## ***Environmental Consulting & Technology, Inc.***

Harper SB-08

**St. Clair Shores Drain Site #2**  
**St. Clair Shores, Michigan**

Date Completed	: 4/15/2010	Boring Location	: Commercial
Hole Diameter	: 2.5 inches		: [REDACTED] Harper
Drilling Company	: EPA (Field Team)		: St. Clair Shores, Michigan
Drilling Method	: Geoprobe		
ECT Rep.	: John Kennedy		

ECT Project #10-0304

Depth in Feet	USCS	GRAPHIC	Sample Recovery	PID	DESCRIPTION	SAMPLE	Depth in Feet	REMARKS
0					15" CLAY, brown, grey, dark grey, mottled, stiff, some SAND, GRAVEL		0	
1					8" CLAY, grey, dark grey, stiff, some SILT		1	
CL			23"	0.0			2	
2							3	
3					2" CLAY, grey, dark grey, stiff, some SILT		4	
					14" CLAY, grey, olive, brown, stiff, trace SAND		5	
					20" CLAY, brown, grey, stiff, trace SAND, SILT		6	
CL			36"	0.0			7	
4							8	
5							9	
6					CLAY, brown, grey, mottled, stiff, some GRAVEL, SAND, SILT, more GRAVEL @ 7.5'		10	
CL			36"	0.0			11	
7							12	
8							13	
9					CLAY, brown, stiff, some GRAVEL, trace SILT		14	
CL			36"	0.0			15	
10								
11								
					EOB - Refusal			



Environmental Consulting & Technology, Inc.

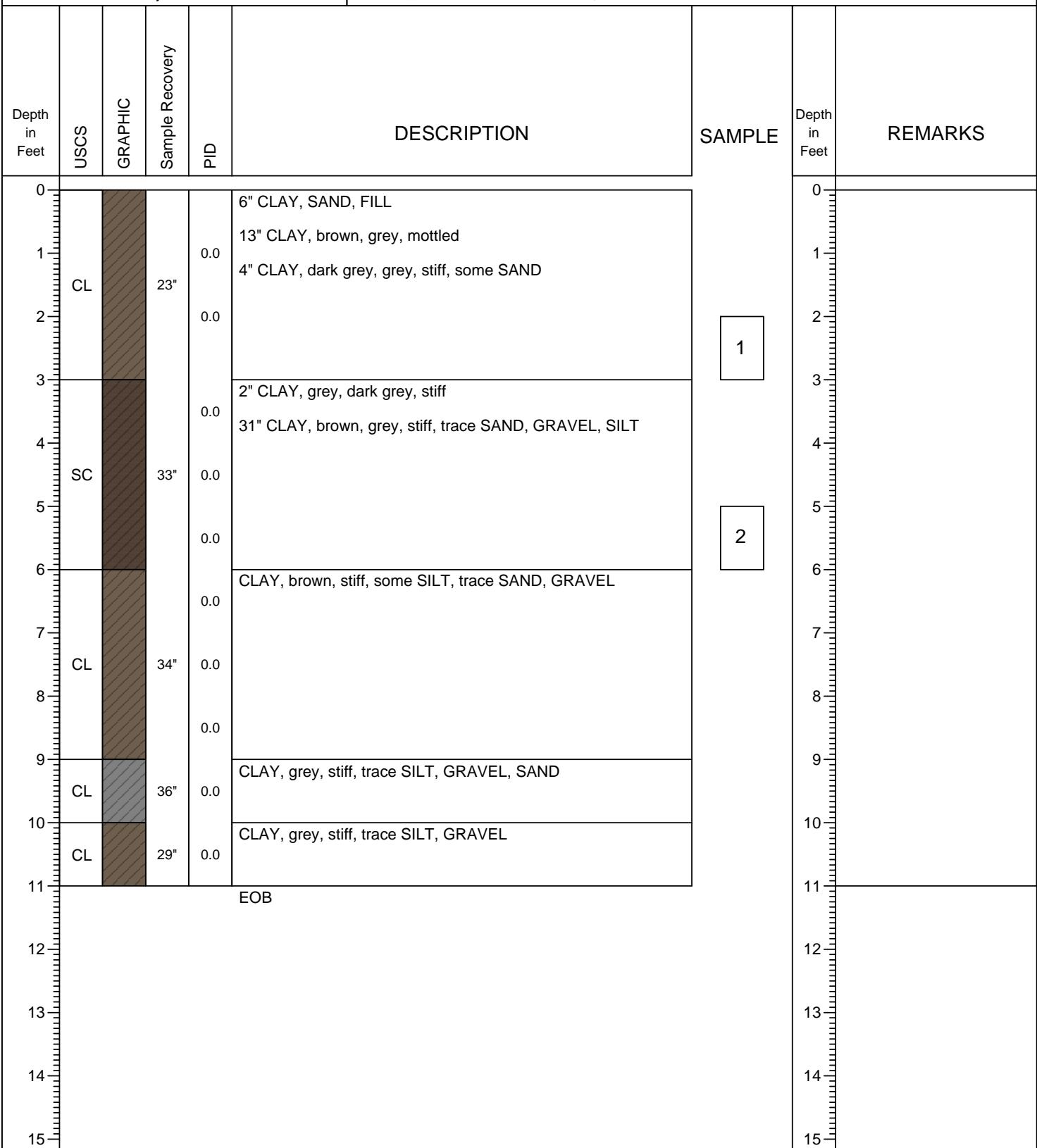
██████████ Harper SB-09

St. Clair Shores Drain Site #2  
St. Clair Shores, Michigan

Date Completed : 4/15/2010  
Hole Diameter : 2.5 inches  
Drilling Company : EPA (Field Team)  
Drilling Method : Geoprobe  
ECT Rep. : John Kennedy

Boring Location : Commercial  
: ██████████ Harper  
: St. Clair Shores, Michigan

ECT Project #10-0304





Environmental Consulting & Technology, Inc.

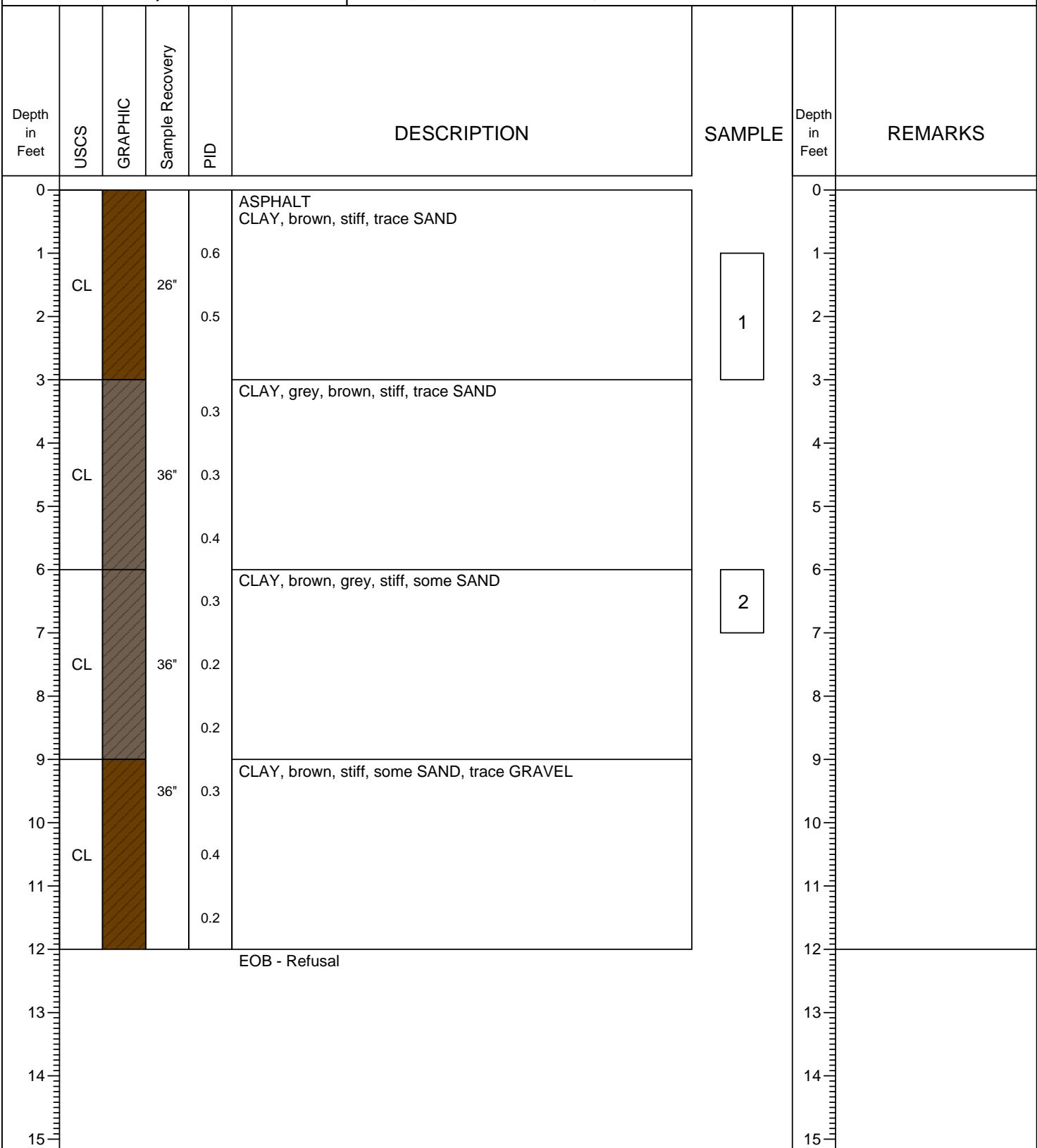
██████████ Harper SB-10

St. Clair Shores Drain Site #2  
St. Clair Shores, Michigan

Date Completed : 4/20/2010  
Hole Diameter : 2.5 inches  
Drilling Company : EPA (Field Team)  
Drilling Method : Geoprobe  
ECT Rep. : John Kennedy

Boring Location : Commercial  
: ██████████ Harper  
: St. Clair Shores, Michigan

ECT Project #10-0304





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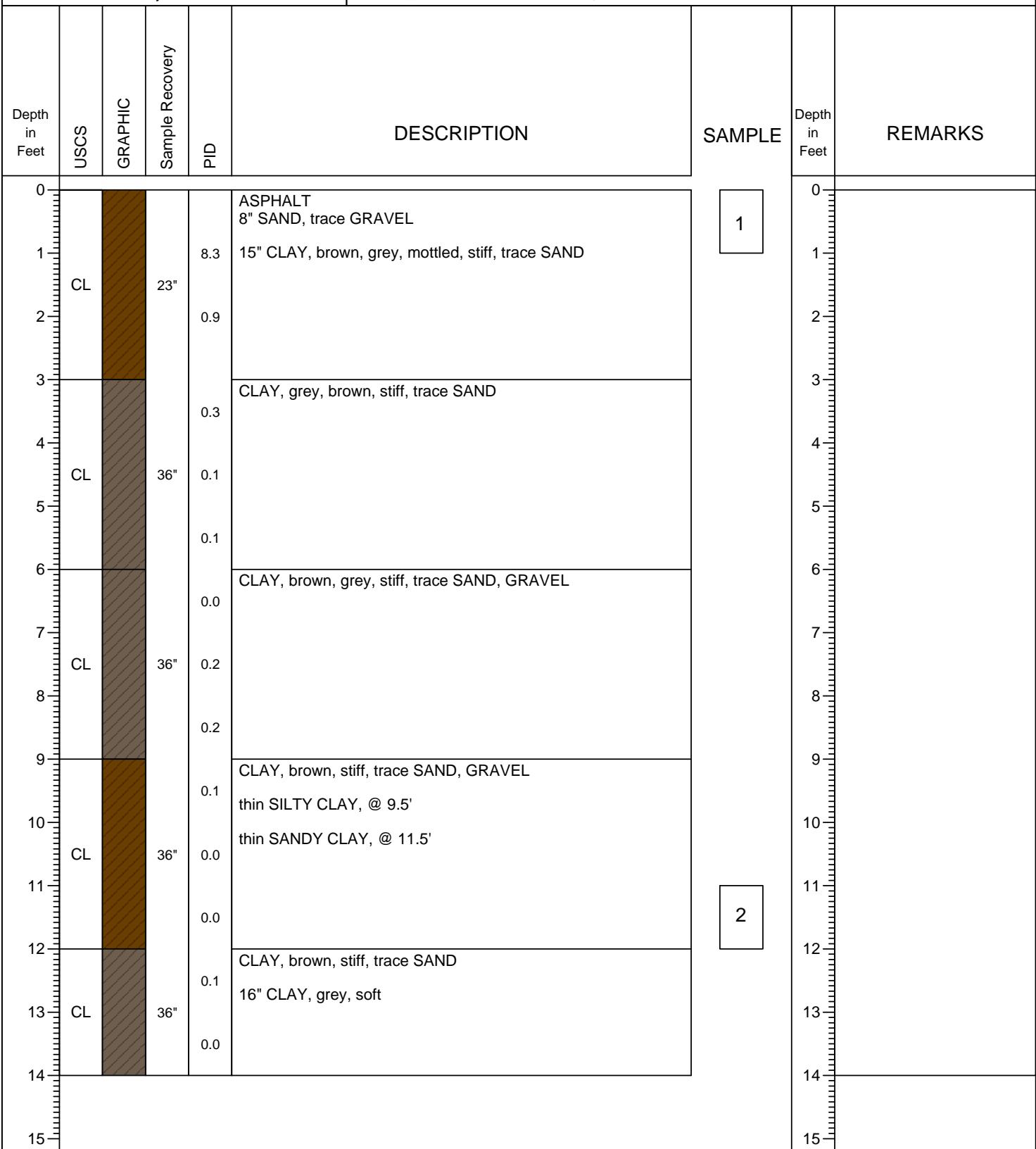
██████████ Harper SB-11

St. Clair Shores Drain Site #2  
St. Clair Shores, Michigan

Date Completed : 4/20/2010  
Hole Diameter : 2.5 inches  
Drilling Company : EPA (Field Team)  
Drilling Method : Geoprobe  
ECT Rep. : John Kennedy

Boring Location : Commercial  
: ██████████ Harper  
: St. Clair Shores, Michigan

ECT Project #10-0304





*Environmental Consulting & Technology, Inc.*

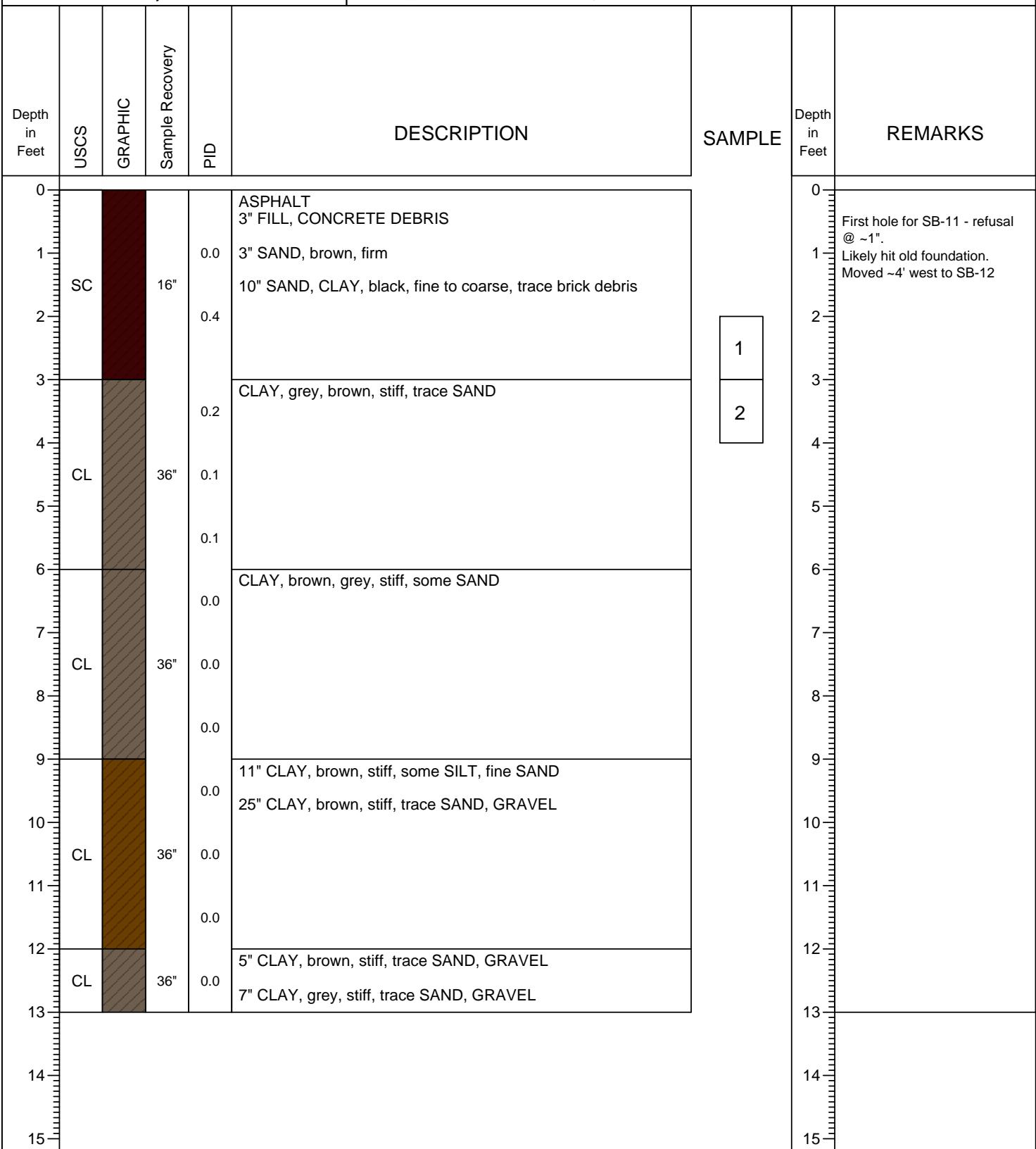
██████████ Harper SB-12

St. Clair Shores Drain Site #2  
St. Clair Shores, Michigan

Date Completed : 4/20/2010  
Hole Diameter : 2.5 inches  
Drilling Company : EPA (Field Team)  
Drilling Method : Geoprobe  
ECT Rep. : John Kennedy

Boring Location : Commercial  
: ██████████ Harper  
: St. Clair Shores, Michigan

ECT Project #10-0304





*Environmental Consulting & Technology, Inc.*

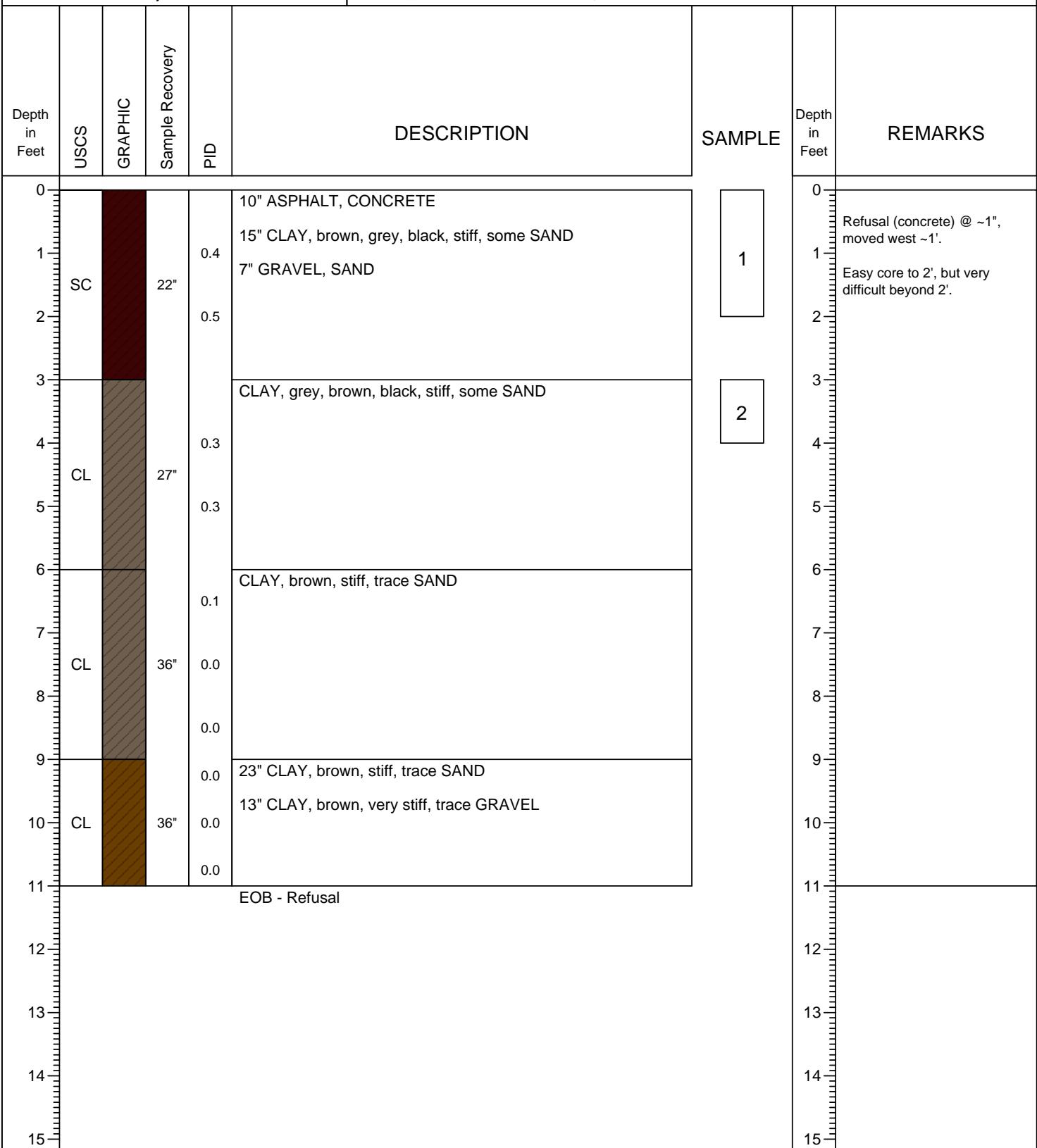
██████████ Harper SB-13

St. Clair Shores Drain Site #2  
St. Clair Shores, Michigan

Date Completed : 4/20/2010  
Hole Diameter : 2.5 inches  
Drilling Company : EPA (Field Team)  
Drilling Method : Geoprobe  
ECT Rep. : John Kennedy

Boring Location : Commercial  
: ██████████ Harper  
: St. Clair Shores, Michigan

ECT Project #10-0304





Environmental Consulting & Technology, Inc.

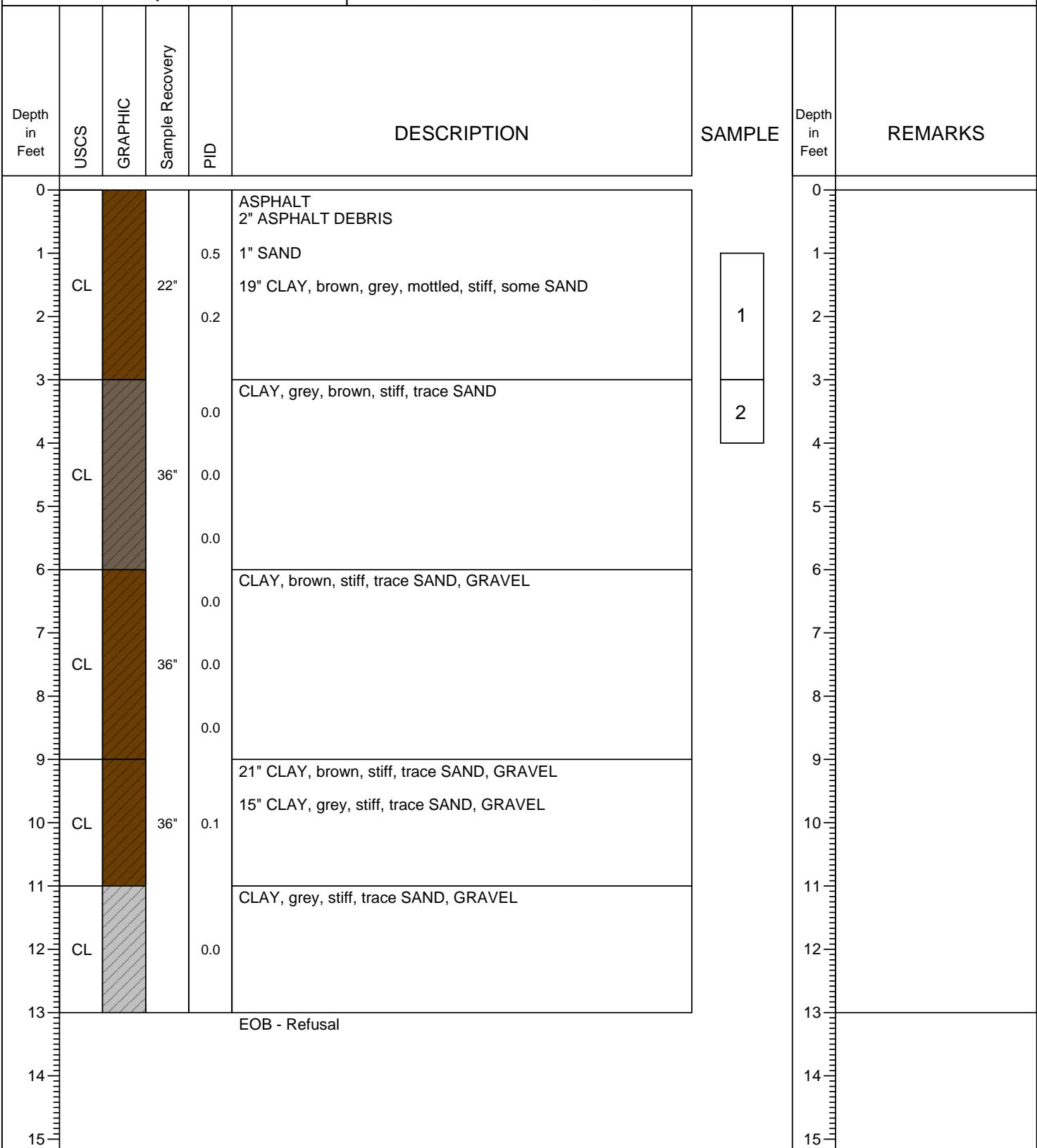
[REDACTED] Harper SB-14

St. Clair Shores Drain Site #2  
St. Clair Shores, Michigan

Date Completed : 4/20/2010  
Hole Diameter : 2.5 inches  
Drilling Company : EPA (Field Team)  
Drilling Method : Geoprobe  
ECT Rep. : John Kennedy

Boring Location : Commercial  
: [REDACTED] Harper  
: St. Clair Shores, Michigan

ECT Project #10-0304





*Environmental Consulting & Technology, Inc.*

██████████ Harper SB-01

St. Clair Shores Drain Site #2  
St. Clair Shores, Michigan

Date Completed : 4/14/2010  
Hole Diameter : 2.5 inches  
Drilling Company : EPA (Field Team)  
Drilling Method : Geoprobe  
ECT Rep. : John Kennedy

Boring Location : Alley  
: ██████████ Harper  
: St. Clair Shores, Michigan

ECT Project #10-0304

Depth in Feet	USCS	GRAPHIC	Sample Recovery	PID	DESCRIPTION	SAMPLE	Depth in Feet	REMARKS
0					SAND, fine to coarse, some GRAVEL, trace SILT, brown, damp		0	
1	GM		14"	0.0			1	
2							2	
3					CLAY, trace SAND, GRAVEL, brown-grey, mottled, stiff, damp		3	First attempt to pull 3-6' no recovery
4	GC		22"	0.0			4	
5							5	
6					0.5		6	No recovery for 6-9'. Liner was wet with SILT 2nd attempt for 7-9'
7	GM		25"	0.0	3" SAND, some CLAY, fine to coarse, brown		7	
8					22" CLAY, trace SAND, GRAVEL, brown, stiff, damp		8	
9					0.5		9	
10	SC		36"	2.5	0.0		10	
11					0.0		11	
12	CL		24"	0.1	0.0		12	Wet from above
13					0.0		13	
14					0.1		14	
15					0.0		15	



Environmental Consulting & Technology, Inc.

██████████ Harper SB-01

St. Clair Shores Drain Site #2  
St. Clair Shores, Michigan

Date Completed : 4/14/2010  
Hole Diameter : 2.5 inches  
Drilling Company : EPA (Field Team)  
Drilling Method : Geoprobe  
ECT Rep. : John Kennedy

Boring Location : Right-of-Way  
: ██████████ Bon Brae  
: St. Clair Shores, Michigan

ECT Project #10-0304

Depth in Feet	USCS	GRAPHIC	Sample Recovery	PID	DESCRIPTION	SAMPLE	Depth in Feet	REMARKS
0					7" TOPSOIL/LOAM		0	
1	SC	██████████	16"		10" trace SAND, brown, some brick debris, moist		1	
2					5" CLAY, trace SAND, brown, fine to medium, stiff		2	
3					CLAY, brown, stiff, grey mottled, damp trace SAND, trace GRAVEL very thin SAND seam @ 5.5'		3	
4	CL			na			4	
5							5	
6					CLAY, trace SAND, GRAVEL, brown, stiff, damp		6	
7							7	
8	GC	██████████	36"				8	
9					CLAY, trace SAND, GRAVEL, brown, stiff, damp		9	
10							10	
11	SC	██████████	36"				11	
12					NA		12	
13							13	
14							14	
15				0			15	



## ***Environmental Consulting & Technology, Inc.***

Harper SB-02

**St. Clair Shores Drain Site #2**  
**St. Clair Shores, Michigan**

Date Completed	: 4/14/2010	Boring Location	: Residential
Hole Diameter	: 2.5 inches		: [REDACTED] Harper
Drilling Company	: EPA (Field Team)		: St. Clair Shores, Michigan
Drilling Method	: Geoprobe		
ECT Rep.	: John Kennedy		

ECT Project #10-0304

Depth in Feet	USCS	GRAPHIC	Sample Recovery	PID	DESCRIPTION	SAMPLE	Depth in Feet	REMARKS
0					NA		0	
3			0		5" TOPSOIL/LOAM		3	
4					5" CLAY, trace SAND, GRAVEL, brown, stiff		4	
5	CL		10"	0.0			5	
6				0.0			6	
7				0.0	CLAY, trace SAND, GRAVEL, brown, stiff, damp		7	
8				0.0	Thin medium to coarse grained SAND seam @ 7.5'		8	
9	GC		36"	0.0			9	
10				0.0			10	
11				0.0			11	
12	SC		35"	0.0	CLAY, trace SAND, GRAVEL, brown, stiff, damp		12	
13				0.0			13	
14				0.0			14	
15	GC		36"		CLAY, trace SAND, GRAVEL, brown, stiff		15	



Environmental Consulting & Technology, Inc.

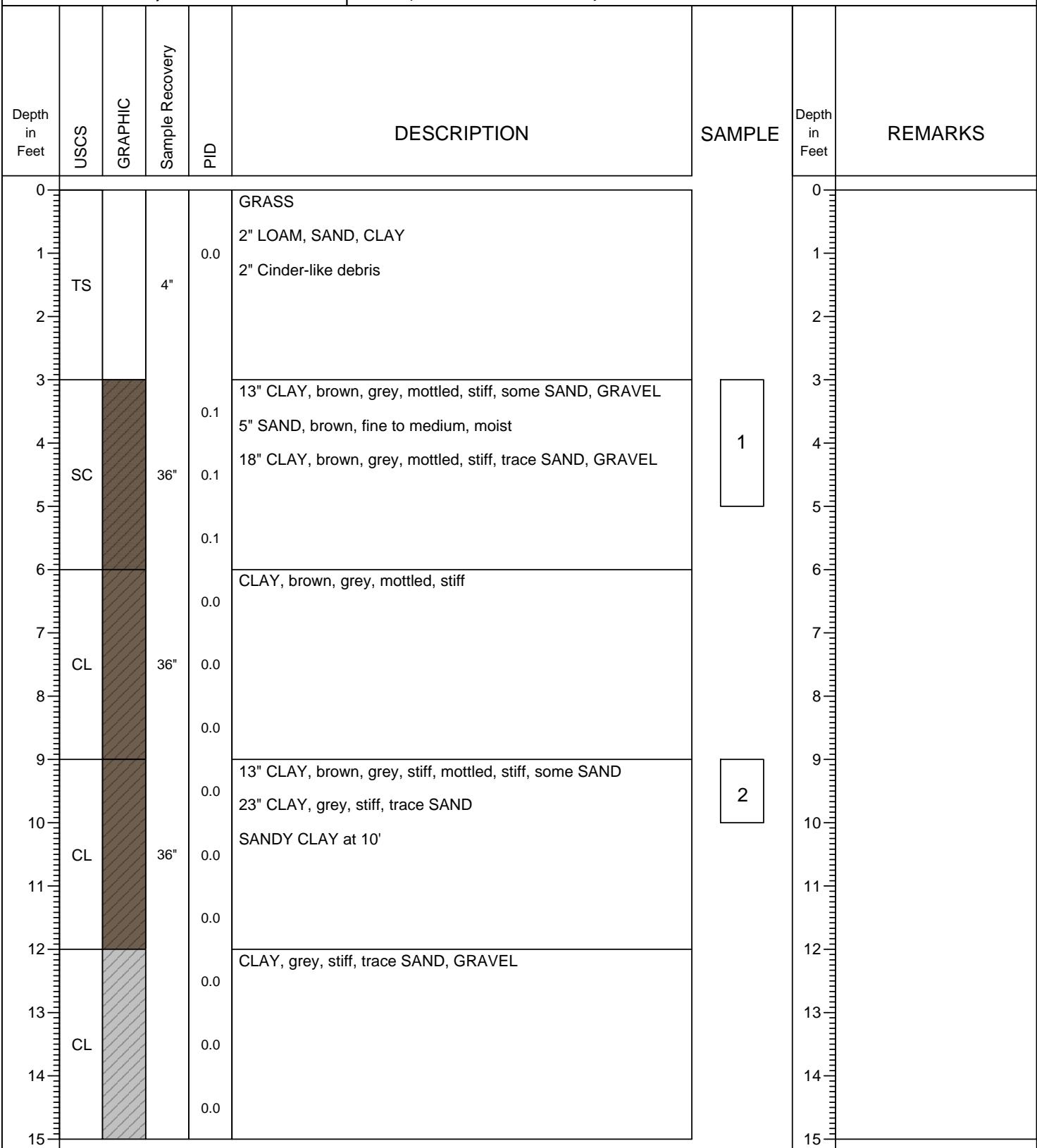
Lakeland SB-01

St. Clair Shores Drain Site #2  
St. Clair Shores, Michigan

Date Completed : 4/20/2010  
Hole Diameter : 2.5 inches  
Drilling Company : EPA (Field Team)  
Drilling Method : Geoprobe  
ECT Rep. : John Kennedy

Boring Location : Residential  
: Lakeland  
: St. Clair Shores, Michigan

ECT Project #10-0304





Environmental Consulting & Technology, Inc.

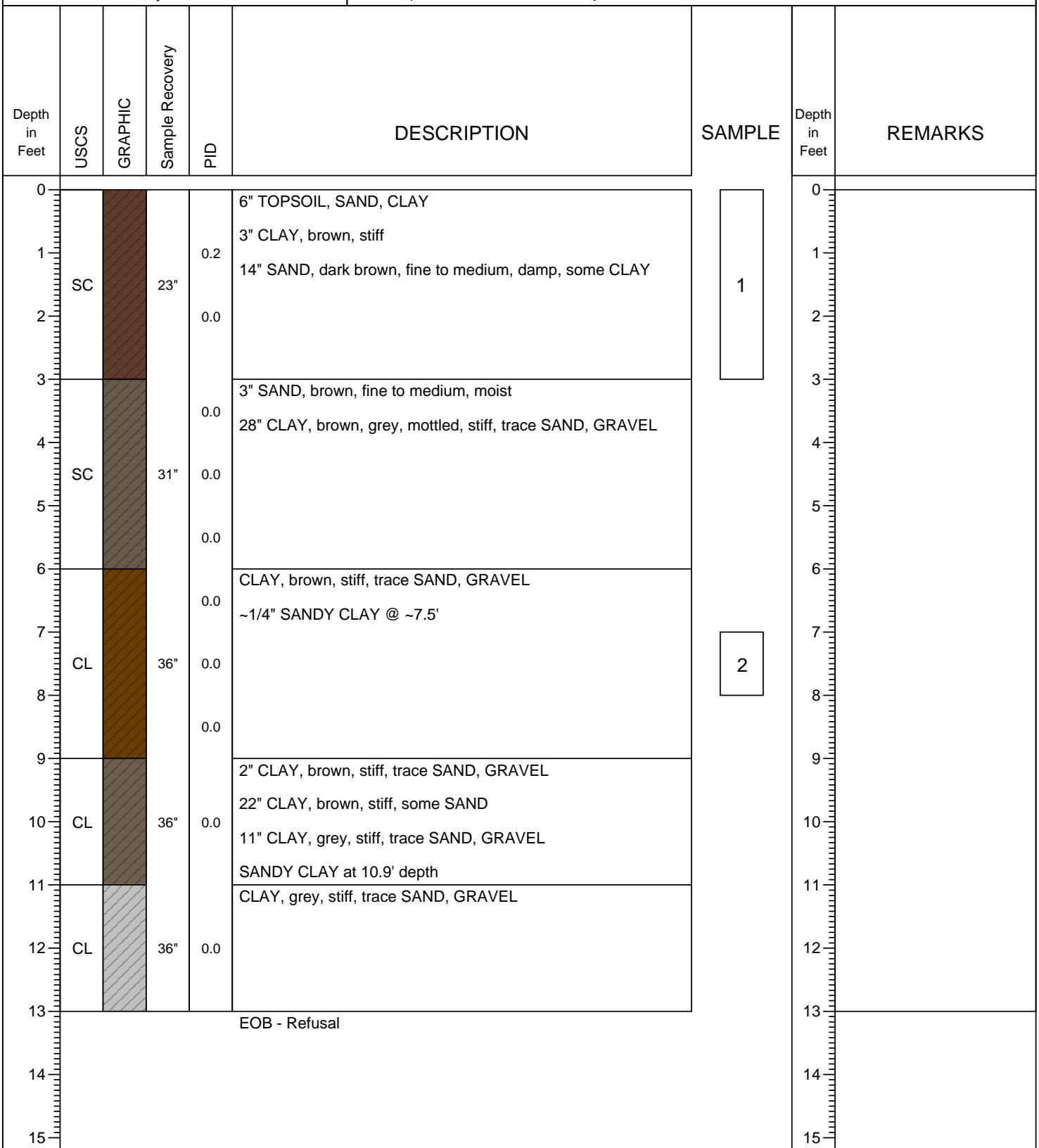
Lakeland SB-01

St. Clair Shores Drain Site #2  
St. Clair Shores, Michigan

Date Completed : 4/20/2010  
Hole Diameter : 2.5 inches  
Drilling Company : EPA (Field Team)  
Drilling Method : Geoprobe  
ECT Rep. : John Kennedy

Boring Location : Residential  
: Lakeland  
: St. Clair Shores, Michigan

ECT Project #10-0304





Environmental Consulting & Technology, Inc.

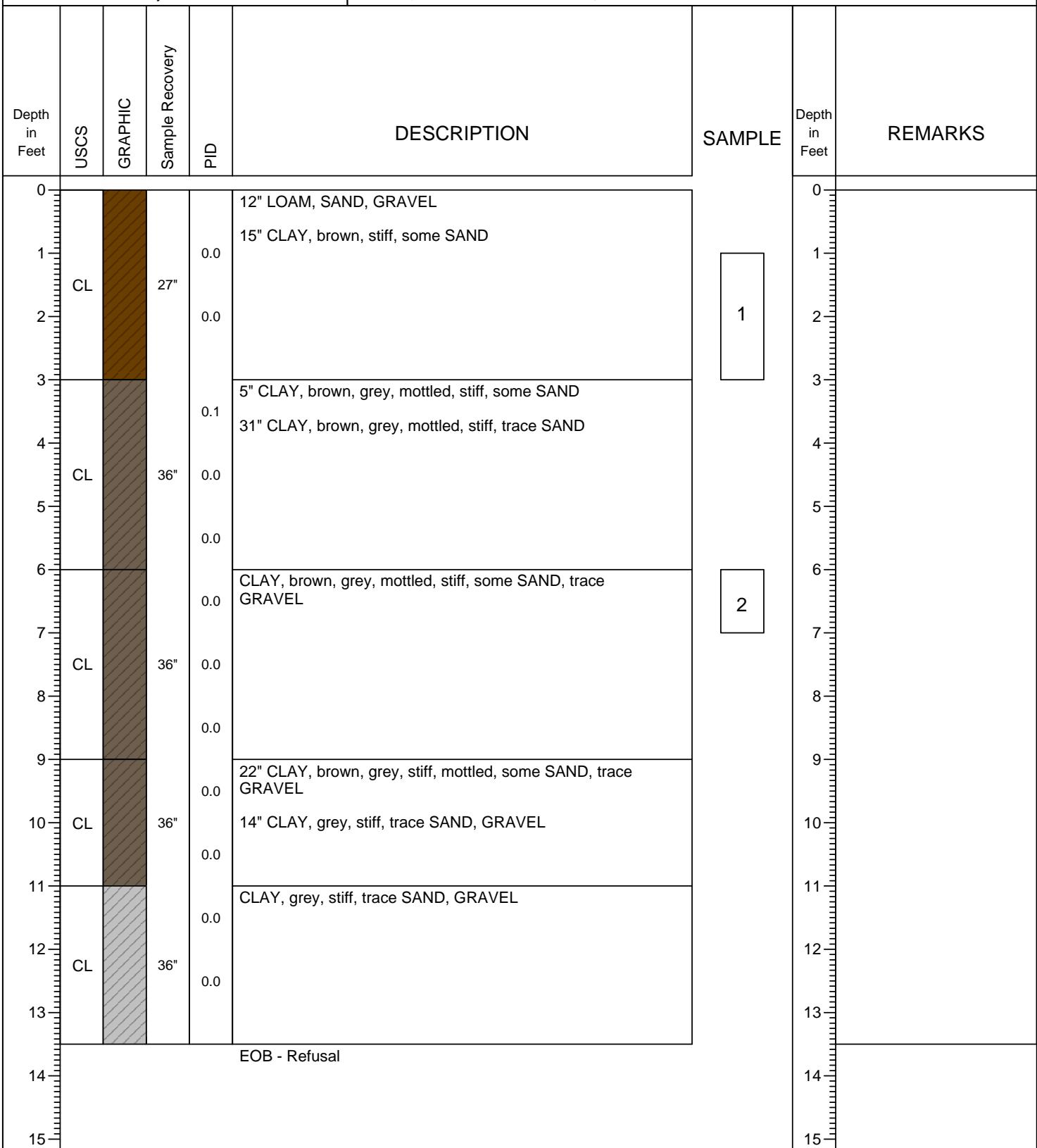
Lakeland SB-02

St. Clair Shores Drain Site #2  
St. Clair Shores, Michigan

Date Completed : 4/20/2010  
Hole Diameter : 2.5 inches  
Drilling Company : EPA (Field Team)  
Drilling Method : Geoprobe  
ECT Rep. : John Kennedy

Boring Location : Residential  
: Lakeland  
: St. Clair Shores, Michigan

ECT Project #10-0304



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**ATTACHMENT D**  
**TABLE**

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**Table 1**  
**Soil Sample Results**  
**Bon Brae/Harper PCB Manhole Removal Site**  
**St. Clair Shores, Macomb County, Michigan**

Field Sample ID No.	Chemical Name	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Total PCBs
	MDNRE Criterion	--	--	--	--	--	--	--	4
	TSCA Criterion	--	--	--	--	--	--	--	50
	Sampling Date	Result (ppm)							
Bon Brae-SB01(3-4)	4/14/2010	0.039 U	0 U						
Bon Brae-SB01 (14-15)	4/14/2010	0.04 U	0.04 U	0.04 U	0.04 U	0.083	0.04 U	0.04 U	0.083
Bon Brae-SB02 (2-3)	4/14/2010	0.044 U	0.17	0.044 U	0.17				
Bon Brae-SB02 (6-7)	4/14/2010	0.047 U	0 U						
Bon Brae-SB01 (2-3')	4/20/2010	0.04 U	0.39	0.04 U	0.39				
Bon Brae-SB01 (9-10')	4/20/2010	0.037 U	0 U						
Bon Brae-SB02 (2-3')	4/20/2010	0.039 U	0 U						
Bon Brae-SB02 (6-9')	4/20/2010	0.037 U	0 U						
Bon Brae-SB01 (3-4')	4/20/2010	0.035 U	0 U						
Bon Brae-SB01 (9-10')	4/20/2010	0.044 U	0.025 J	0.044 U	0.025				
Bon Brae-SB02 (0-3')	4/20/2010	0.039 U	0.021 J	0.039 U	0.021				
Bon Brae-SB02 (3-6')	4/20/2010	0.041 U	0 U						
Lakeland-SB01 (3-5')	4/20/2010	0.04 U	0 U						
Lakeland-SB01 (3-5')D	4/20/2010	0.04 U	0 U						
Lakeland-SB01 (9-10')	4/20/2010	0.038 U	0 U						
Lakeland-SB01 (0-3')	4/20/2010	0.04 U	0.025 J	0.04 U	0.025				
Lakeland-SB01 (7-8')	4/20/2010	0.038 U	0 U						
Lakeland-SB02 (1-3')	4/20/2010	0.041 U	0 U						
Lakeland-SB02 (6-7')	4/20/2010	0.037 U	0 U						
Bon Heur-SB01 (2-3)	4/19/2010	0.039 U	0 U						
Bon Heur-SB01 (4-5)	4/19/2010	0.042 U	0 U						
Bon Heur-SB02 (0-3)	4/19/2010	0.04 U	0.04 U	0.04 U	0.04 U	0.083	0.04 U	0.021 J	0.104
Bon Heur-SB02 (10-11)	4/19/2010	0.041 U	0 U						
Bon Heur-SB03 (1-3)	4/19/2010	0.039 U	0 U						
Bon-Heur-SB03 (4-5)	4/19/2010	0.041 U	0 U						
Bon Heur-SB03 (4-5)D	4/19/2010	0.043 U	0 U						
Harper-SB01 (2-3)	4/16/2010	0.19 U	0.19 U	0.19 U	0.19 U	0.74	0.19 U	0.19 U	0.74
Harper-SB01 (9-11)	4/16/2010	40 U	40 U	40 U	40 U	350	40 U	40 U	350
Harper-SB01 (9-11)D	4/16/2010	40 U	40 U	40 U	40 U	260	40 U	40 U	260
Harper-SB01 (13-15)	4/16/2010	0.21 U	0.21 U	0.21 U	0.59	0.21 U	0.14 J	0.21 U	0.73
Harper-SB03 (0-3)	4/16/2010	0.041 U	0.041 U	0.041 U	0.041 U	0.068	0.041 U	0.041 U	0.068
Harper-SB02 (9-12)	4/16/2010	0.041 U	0.041 U	0.041 U	0.044	0.041 U	0.041 U	0.041 U	0.044
Harper-SB02 (12-13.5)	4/16/2010	0.039 U	0.039 U	0.039 U	0.064	0.039 U	0.039 U	0.039 U	0.064
Harper-SB03 (4-5)	4/16/2010	0.042 U	0 U						
Harper-SB04 (2-4)	4/16/2010	0.4 U	0.4 U	0.4 U	0.4 U	5.6	0.4 U	0.65	6.25
Harper-SB04 (6-8)	4/16/2010	0.046 U	0 U						
Harper-SB04 (6-8)D	4/16/2010	0.046 U	0 U						
Harper-SB05 (0-2)	4/21/2010	0.35 U	0.35 U	0.35 U	0.35 U	4.1	0.35 U	0.48	4.58

**Table 1**  
**Soil Sample Results**  
**Bon Brae/Harper PCB Manhole Removal Site**  
**St. Clair Shores, Macomb County, Michigan**

Field Sample ID No.	Chemical Name	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Total PCBs
	MDNRE Criterion	--	--	--	--	--	--	--	4
	TSCA Criterion	--	--	--	--	--	--	--	50
	Sampling Date	Result (ppm)							
Harper-SB05 (0-2)D	4/21/2010	0.17 U	0.17 U	0.17 U	0.17 U	1.5	0.17 U	0.14 J	1.64
Harper-SB05 (10-12)	4/21/2010	0.04 U	0 U						
Harper-SB06 (5-6)	4/21/2010	0.041 U	0 U						
Harper-SB06 (10-11)	4/21/2010	0.038 U	0 U						
Harper-SB07 (4-5)	4/21/2010	0.041 U	0.041 U	0.041 U	0.041 U	0.33	0.041 U	0.025 J	0.355
Harper-SB07 (6-8)	4/21/2010	0.046 U	0.046 U	0.046 U	0.35	0.046 U	0.62	0.046 U	0.97
Harper-SB08 (1-3)	4/21/2010	0.041 U	0.041 U	0.041 U	0.041 U	0.63	0.041 U	0.099	0.729
Harper-SB08 (8-9)	4/21/2010	0.037 U	0 U						
Harper-SB01 (6-7')	4/13/2010	0.038 U	0.038 U	0.038 U	0.038 U	0.028 J	0.038 U	0.038 U	0.028
Harper-SB01 (7-8')	4/13/2010	0.037 U	0 U						
Harper-SB02 (2-3')	4/13/2010	0.039 U	0 U						
Harper-SB02 (9-10')	4/13/2010	0.037 U	0 U						
Harper-SB03 (3-4')	4/13/2010	0.035 U	0 U						
Harper-SB03 (7-8')	4/13/2010	0.038 U	0 U						
Harper-SB04 (0-3')	4/13/2010	0.039 U	0 U						
Harper-SB04 (9-10.5')	4/13/2010	0.038 U	0 U						
Harper-SB05 (2-3')	4/13/2010	0.039 U	0 U						
Harper-SB05 (9-10.5')	4/13/2010	0.037 U	0 U						
Harper-SB06 (1-2')	4/13/2010	0.041 U	0 U						
Harper-SB06 (3-4')	4/13/2010	0.038 U	0 U						
Harper-SB01 (1-3)	4/15/2010	0.039 U	0 U						
Harper-SB01 (13-14)	4/15/2010	0.043 U	0 U						
Harper-SB02 (0-1.5)	4/15/2010	0.04 U	0 U						
Harper-SB02 (12-13)	4/15/2010	0.039 U	0 U						
Harper-SB03 (3-4)	4/15/2010	0.044 U	0 U						
Harper-SB03 (12-13)	4/15/2010	0.038 U	0 U						
Harper-SB03 (12-13)D	4/15/2010	0.039 U	0 U						
Harper-SB04 (3-4)	4/15/2010	0.044 U	0 U						
Harper-SB04 (7-8)	4/15/2010	0.04 U	0.04 U	0.04 U	0.045	0.04 U	0.04 U	0.04 U	0.045
Harper-SB05 (0-3)	4/15/2010	0.04 U	0.04 U	0.04 U	0.055	0.04 U	0.04 U	0.04 U	0.055
Harper-SB05 (9-10)	4/15/2010	0.038 U	0 U						
Harper-SB06 (3-4)	4/15/2010	0.047 U	0 U						
Harper-SB06 (9-10)	4/15/2010	0.05 U	0.05 U	0.05 U	0.026 J	0.05 U	0.05 U	0.05 U	0.026
Harper-SB07 (0-2)	4/15/2010	0.039 U	0 U						
Harper-SB07 (2-3)	4/15/2010	0.047 U	0 U						
Harper-SB07 (3-5)	4/15/2010	0.043 U	0 U						
Harper-SB08 (0-2)	4/15/2010	0.041 U	0.041 U	0.041 U	0.041 U	0.19	0.041 U	0.041 U	0.19
Harper-SB08 (2-3)	4/15/2010	0.042 U	0 U						

**Table 1**  
**Soil Sample Results**  
**Bon Brae/Harper PCB Manhole Removal Site**  
**St. Clair Shores, Macomb County, Michigan**

Field Sample ID No.	Chemical Name	Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Total PCBs
	MDNRE Criterion	--	--	--	--	--	--	--	4
	TSCA Criterion	--	--	--	--	--	--	--	50
	Sampling Date	Result (ppm)							
Harper-SB08 (2-3)D	4/15/2010	0.041 U	0 U						
Harper-SB09 (2-3)	4/15/2010	0.039 U	0 U						
Harper-SB09 (5-6)	4/15/2010	0.039 U	0 U						
Harper-SB10 (1-3')	4/20/2010	0.042 U	0 U						
Harper-SB10 (1-3')D	4/20/2010	0.047 U	0.078	0.047 U	0.078				
Harper-SB10 (6-7)	4/20/2010	0.04 U	0 U						
Harper-SB11 (0-1')	4/20/2010	0.035 U	0.035 U	0.035 U	0.035 U	0.066	0.035 U	0.035 U	0.066
Harper-SB11 (11-12')	4/20/2010	0.037 U	0 U						
Harper-SB12 (2-3')	4/20/2010	0.042 U	0 U						
Harper-SB12 (3-4')	4/20/2010	0.042 U	0 U						
Harper-SB13 (0-2')	4/20/2010	0.41 U	0 U						
Harper-SB13 (3-4')	4/20/2010	0.04 U	0 U						
Harper-SB14 (0-2')	4/20/2010	0.038 U	0.038 U	0.038 U	0.038 U	0.53	0.038 U	0.068	0.598
Harper-SB14 (3-4')	4/20/2010	0.041 U	0 U						
Harper-SB14 (3-4')D	4/20/2010	0.04 U	0 U						
Harper-SB01 (0-3)	4/14/2010	0.038 U	0.15	0.038 U	0.15				
Harper-SB01 (8-9)	4/14/2010	0.042 U	0 U						
Harper-SB01 (1-2)	4/14/2010	0.04 U	0 U						
Harper-SB01 (4-6)	4/14/2010	0.042 U	0 U						
Harper-SB01 (4-6)D	4/14/2010	0.046 U	0 U						
Harper-SB02 (5-6)	4/14/2010	0.042 U	0 U						
Harper-SB02 (7-9)	4/14/2010	0.042 U	0 U						

Notes:

**Bold results exceed the MDNRE Residential Direct Contact Criterion for total PCBs.**

Shaded results exceed the TSCA criterion for total PCBs.

Samples were analyzed using U.S. EPA SW-846 Method 8082.

ID = Identification

J = Estimated value

MDNRE = Michigan Department of Natural Resources and Environment

PCB = Polychlorinated biphenyl

ppm = Part per million

TSCA = Toxic Substances Control Act

U = Not detected

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**ATTACHMENT E**  
**DATA VALIDATION REPORTS**

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**ST. CLAIR SHORES  
BON BRAE REMOVAL SITE  
ST. CLAIR SHORES, MICHIGAN  
DATA VALIDATION REPORT**

**Date:** May 19, 2010

**Laboratory:** TestAmerica, North Canton, Ohio

**Laboratory Work Order #s:** A0D150506

**Data Validation Performed By:** Lisa Graczyk, Weston Solutions, Inc. (WESTON<sup>®</sup>) Superfund Technical and Response Team (START)

**Weston Work Order #:** 20405.012.001.0893.00

This data validation report has been prepared by WESTON START under the START III Region V contract. This report documents the data validation for one rinsate blank and twelve soil samples that were collected for the St. Clair Shores Bon Brae Removal Site that was analyzed for polychlorinated biphenyls (PCB) using U.S. Environmental Protection Agency (U.S. EPA) SW-846 Method 8082.

A quality assurance (QA) level II data package was received from TestAmerica. Note that the QA Level II data package does not contain chromatograms and instrument printouts. The data validation was conducted in general accordance with the U.S. EPA "Contract Laboratory Program National Functional Guidance for Superfund Organic Methods Data Review" dated June 2008. The attachment contains the results summary sheets.

**PCBs BY U.S. EPA SW-846 METHOD 8082**

**1. Samples**

The following table summarizes the samples for which this data validation was conducted.

<b>Samples</b>	<b>Lab ID</b>	<b>Matrix</b>	<b>Date Collected</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>
HARPER-SB01(6-7')	A0D150506-001	Soil	4/13/2010	4/16/2010	4/20/2010
HARPER-SB01(7-8')	A0D150506-002	Soil	4/13/2010	4/16/2010	4/20/2010
HARPER-SB02(2-3')	A0D150506-003	Soil	4/13/2010	4/16/2010	4/20/2010
HARPER-SB02(9-10')	A0D150506-004	Soil	4/13/2010	4/16/2010	4/20/2010
HARPER-SB03(3-4')	A0D150506-005	Soil	4/13/2010	4/16/2010	4/20/2010
HARPER-SB03(7-8')	A0D150506-006	Soil	4/13/2010	4/16/2010	4/20/2010
HARPER-SB04(0-3')	A0D150506-007	Soil	4/13/2010	4/16/2010	4/20/2010
HARPER-SB04(9-10.5')	A0D150506-008	Soil	4/13/2010	4/16/2010	4/20/2010
HARPER-SB05(2-3')	A0D150506-009	Soil	4/13/2010	4/16/2010	4/20/2010
HARPER-SB05(9-10.5')	A0D150506-010	Soil	4/13/2010	4/16/2010	4/20/2010
HARPER-RINSE	A0D150506-011	Water	4/13/2010	4/16/2010	4/19/2010
HARPER-SB06(1-2')	A0D150506-012	Soil	4/13/2010	4/16/2010	4/20/2010
HARPER-SB06(3-4')	A0D150506-013	Soil	4/13/2010	4/16/2010	4/20/2010

Data Validation Report  
St. Clair Shores Bon Brae Removal Site  
TestAmerica  
Laboratory Work Order #: A0D160509

**2. Holding Times**

The samples were analyzed within the required holding time limit of 14 days from sample collection to extraction and 40 days from extraction to analysis for soil samples; and 7 days from sample collection to extraction and 40 days from extraction to analysis for water samples.

**3. Blanks**

A method blank was analyzed with the sample as required and was free of target compound contamination above the reporting limit.

**4. Surrogates**

The surrogate recoveries were within the laboratory-established quality control (QC) limits for percent recovery.

**5. Laboratory Control Sample (LCS) Results**

The LCS and LCS duplicate recoveries and relative percent differences (RPD) were within the laboratory-established QC limits.

**6. Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Results**

The MS and MSD recoveries and RPDs were within the laboratory-established QC limits.

**7. Overall Assessment**

There was a detection below the reporting limit and the laboratory appropriately flagged this result "J" as estimated. The data are acceptable for use as qualified based on the information received.

Data Validation Report  
St. Clair Shores Bon Brae Removal Site  
TestAmerica  
Laboratory Work Order #: A0D160509

**ATTACHMENT**

**TESTAMERICA  
RESULTS SUMMARY**

**Environmental Quality Mgt., Inc.**

**Client Sample ID: [REDACTED] HARPER-SB01(6-7')**

**GC Semivolatiles**

**Lot-Sample #....:** A0D150506-001    **Work Order #....:** LX1XH1AC    **Matrix.....:** SO  
**Date Sampled....:** 04/13/10 12:30    **Date Received..:** 04/15/10  
**Prep Date.....:** 04/16/10    **Analysis Date..:** 04/20/10  
**Prep Batch #....:** 0106035  
**Dilution Factor:** 1  
**% Moisture.....:** 13    **Method.....:** SW846 8082

<b>PARAMETER</b>	<b>RESULT</b>	<b>REPORTING</b>	
		<b>LIMIT</b>	<b>UNITS</b>
Aroclor 1016	ND	38	ug/kg
Aroclor 1221	ND	38	ug/kg
Aroclor 1232	ND	38	ug/kg
Aroclor 1242	ND	38	ug/kg
<b>Aroclor 1248</b>	<b>28 J</b>	<b>38</b>	<b>ug/kg</b>
Aroclor 1254	ND	38	ug/kg
Aroclor 1260	ND	38	ug/kg

<b>SURROGATE</b>	<b>PERCENT</b>	<b>RECOVERY</b>	
		<b>RECOVERY</b>	<b>LIMITS</b>
Tetrachloro-m-xylene	85	(10 - 196)	
Decachlorobiphenyl	91	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] HARPER-SB01(6-7')

General Chemistry

Lot-Sample #....: A0D150506-001    Work Order #....: LX1XH                  Matrix.....: SO  
Date Sampled....: 04/13/10 12:30    Date Received..: 04/15/10  
% Moisture.....: 13

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	86.9	10.0	%	MCAWW 160.3 MOD	04/16-04/19/10	0106322

Dilution Factor: 1

**Environmental Quality Mgt., Inc.**

**Client Sample ID:** [REDACTED] HARPER-SB01(7-8')

**GC Semivolatiles**

**Lot-Sample #....:** A0D150506-002    **Work Order #....:** LX1XK1AC    **Matrix.....:** SO  
**Date Sampled....:** 04/13/10 12:35    **Date Received..:** 04/15/10  
**Prep Date.....:** 04/16/10    **Analysis Date..:** 04/20/10  
**Prep Batch #....:** 0106035  
**Dilution Factor:** 1  
**% Moisture.....:** 11    **Method.....:** SW846 8082

<b>PARAMETER</b>	<b>RESULT</b>	<b>REPORTING</b>	
		<b>LIMIT</b>	<b>UNITS</b>
Aroclor 1016	ND	37	ug/kg
Aroclor 1221	ND	37	ug/kg
Aroclor 1232	ND	37	ug/kg
Aroclor 1242	ND	37	ug/kg
Aroclor 1248	ND	37	ug/kg
Aroclor 1254	ND	37	ug/kg
Aroclor 1260	ND	37	ug/kg

<b>SURROGATE</b>	<b>RECOVERY</b>	<b>RECOVERY</b>	
		<b>LIMITS</b>	
Tetrachloro-m-xylene	72	(10 - 196)	
Decachlorobiphenyl	72	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

**Environmental Quality Mgt., Inc.**

**Client Sample ID:** [REDACTED] HARPER-SB01(7-8')

**General Chemistry**

**Lot-Sample #....:** A0D150506-002    **Work Order #....:** LX1XK                **Matrix.....:** SO  
**Date Sampled....:** 04/13/10 12:35    **Date Received..:** 04/15/10  
**% Moisture.....:** 11

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
					<u>ANALYSIS DATE</u>	<u>BATCH #</u>
<b>Percent Solids</b>	<b>89.3</b>	<b>10.0</b>	<b>%</b>	<b>MCAWW 160.3 MOD</b>	<b>04/16-04/19/10</b>	<b>0106322</b>

Dilution Factor: 1

**Environmental Quality Mgt., Inc.**

**Client Sample ID:** [REDACTED] HARPER-SB02(2-3')

**GC Semivolatiles**

**Lot-Sample #....:** A0D150506-003    **Work Order #....:** LX1XM1AC    **Matrix.....:** SO  
**Date Sampled....:** 04/13/10 13:55    **Date Received..:** 04/15/10  
**Prep Date.....:** 04/16/10    **Analysis Date..:** 04/20/10  
**Prep Batch #....:** 0106035  
**Dilution Factor:** 1  
**% Moisture.....:** 14    **Method.....:** SW846 8082

<b>PARAMETER</b>	<b>RESULT</b>	<b>REPORTING</b>	
		<b>LIMIT</b>	<b>UNITS</b>
Aroclor 1016	ND	39	ug/kg
Aroclor 1221	ND	39	ug/kg
Aroclor 1232	ND	39	ug/kg
Aroclor 1242	ND	39	ug/kg
Aroclor 1248	ND	39	ug/kg
Aroclor 1254	ND	39	ug/kg
Aroclor 1260	ND	39	ug/kg

<b>SURROGATE</b>	<b>RECOVERY</b>	<b>PERCENT</b>	<b>RECOVERY</b>
		<b>LIMITS</b>	
Tetrachloro-m-xylene	68	(10 - 196)	
Decachlorobiphenyl	72	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

**Environmental Quality Mgt., Inc.**

**Client Sample ID:** [REDACTED] HARPER-SB02(2-3')

**General Chemistry**

**Lot-Sample #....:** A0D150506-003    **Work Order #....:** LX1XM                **Matrix.....:** SO  
**Date Sampled....:** 04/13/10 13:55    **Date Received..:** 04/15/10  
**% Moisture.....:** 14

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
					<u>ANALYSIS DATE</u>	<u>BATCH #</u>
<b>Percent Solids</b>	<b>85.5</b>	<b>10.0</b>	<b>%</b>	<b>MCAWW 160.3 MOD</b>	<b>04/16-04/19/10</b>	<b>0106322</b>

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] HARPER-SB02(9-10')

GC Semivolatiles

Lot-Sample #....: A0D150506-004 Work Order #....: LX1XP1AC Matrix.....: SO  
Date Sampled....: 04/13/10 14:00 Date Received..: 04/15/10  
Prep Date.....: 04/16/10 Analysis Date..: 04/20/10  
Prep Batch #....: 0106035  
Dilution Factor: 1  
% Moisture.....: 11 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	37	ug/kg
Aroclor 1221	ND	37	ug/kg
Aroclor 1232	ND	37	ug/kg
Aroclor 1242	ND	37	ug/kg
Aroclor 1248	ND	37	ug/kg
Aroclor 1254	ND	37	ug/kg
Aroclor 1260	ND	37	ug/kg

SURROGATE	RECOVERY	PERCENT	RECOVERY
		LIMITS	
Tetrachloro-m-xylene	82	(10 - 196)	
Decachlorobiphenyl	84	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] HARPER-SB02(9-10')

General Chemistry

Lot-Sample #....: A0D150506-004    Work Order #....: LX1XP                  Matrix.....: SO  
Date Sampled....: 04/13/10 14:00    Date Received..: 04/15/10  
% Moisture.....: 11

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	88.9	10.0	%	MCAWW 160.3 MOD	04/16-04/19/10	0106322

Dilution Factor: 1

**Environmental Quality Mgt., Inc.**

**Client Sample ID:** [REDACTED] HARPER-SB03(3-4')

**GC Semivolatiles**

**Lot-Sample #....:** A0D150506-005    **Work Order #....:** LX1XQ1AC    **Matrix.....:** SO  
**Date Sampled....:** 04/13/10 14:40    **Date Received..:** 04/15/10  
**Prep Date.....:** 04/16/10    **Analysis Date..:** 04/20/10  
**Prep Batch #....:** 0106035  
**Dilution Factor:** 1  
**% Moisture.....:** 5.9    **Method.....:** SW846 8082

<b>PARAMETER</b>	<b>RESULT</b>	<b>REPORTING</b>	
		<b>LIMIT</b>	<b>UNITS</b>
Aroclor 1016	ND	35	ug/kg
Aroclor 1221	ND	35	ug/kg
Aroclor 1232	ND	35	ug/kg
Aroclor 1242	ND	35	ug/kg
Aroclor 1248	ND	35	ug/kg
Aroclor 1254	ND	35	ug/kg
Aroclor 1260	ND	35	ug/kg

<b>SURROGATE</b>	<b>RECOVERY</b>	<b>PERCENT</b>	<b>RECOVERY</b>
		<b>LIMITS</b>	
Tetrachloro-m-xylene	75	(10 - 196)	
Decachlorobiphenyl	81	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] HARPER-SB03(3-4')

General Chemistry

Lot-Sample #....: A0D150506-005    Work Order #....: LX1XQ                Matrix.....: SO  
Date Sampled....: 04/13/10 14:40    Date Received..: 04/15/10  
% Moisture.....: 5.9

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	ANALYSIS DATE	BATCH #
Percent Solids	94.1	10.0	%	MCAWW 160.3 MOD	04/16-04/19/10	0106322

Dilution Factor: 1

**Environmental Quality Mgt., Inc.**

**Client Sample ID:** [REDACTED] HARPER-SB03(7-8')

**GC Semivolatiles**

**Lot-Sample #....:** A0D150506-006    **Work Order #....:** LX1XR1AC    **Matrix.....:** SO  
**Date Sampled....:** 04/13/10 14:45    **Date Received..:** 04/15/10  
**Prep Date.....:** 04/16/10    **Analysis Date..:** 04/20/10  
**Prep Batch #....:** 0106035  
**Dilution Factor:** 1  
**% Moisture.....:** 12    **Method.....:** SW846 8082

<b>PARAMETER</b>	<b>RESULT</b>	<b>REPORTING</b>	
		<b>LIMIT</b>	<b>UNITS</b>
Aroclor 1016	ND	38	ug/kg
Aroclor 1221	ND	38	ug/kg
Aroclor 1232	ND	38	ug/kg
Aroclor 1242	ND	38	ug/kg
Aroclor 1248	ND	38	ug/kg
Aroclor 1254	ND	38	ug/kg
Aroclor 1260	ND	38	ug/kg

<b>SURROGATE</b>	<b>RECOVERY</b>	<b>PERCENT</b>	<b>RECOVERY</b>
		<b>LIMITS</b>	
Tetrachloro-m-xylene	89	(10 - 196)	
Decachlorobiphenyl	89	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

**Environmental Quality Mgt., Inc.**

**Client Sample ID:** [REDACTED] HARPER-SB03(7-8')

**General Chemistry**

**Lot-Sample #....:** A0D150506-006    **Work Order #....:** LX1XR                **Matrix.....:** SO  
**Date Sampled....:** 04/13/10 14:45    **Date Received..:** 04/15/10  
**% Moisture.....:** 12

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
					<u>ANALYSIS DATE</u>	<u>BATCH #</u>
<b>Percent Solids</b>	<b>87.8</b>	<b>10.0</b>	<b>%</b>	<b>MCAWW 160.3 MOD</b>	<b>04/16-04/19/10</b>	<b>0106322</b>

Dilution Factor: 1

**Environmental Quality Mgt., Inc.**

**Client Sample ID:** [REDACTED] HARPER-SB04(0-3')

**GC Semivolatiles**

**Lot-Sample #....:** A0D150506-007    **Work Order #....:** LX1XT1AC    **Matrix.....:** SO  
**Date Sampled....:** 04/13/10 15:40    **Date Received..:** 04/15/10  
**Prep Date.....:** 04/16/10    **Analysis Date..:** 04/20/10  
**Prep Batch #....:** 0106035  
**Dilution Factor:** 1  
**% Moisture.....:** 15    **Method.....:** SW846 8082

<b>PARAMETER</b>	<b>RESULT</b>	<b>REPORTING</b>	
		<b>LIMIT</b>	<b>UNITS</b>
Aroclor 1016	ND	39	ug/kg
Aroclor 1221	ND	39	ug/kg
Aroclor 1232	ND	39	ug/kg
Aroclor 1242	ND	39	ug/kg
Aroclor 1248	ND	39	ug/kg
Aroclor 1254	ND	39	ug/kg
Aroclor 1260	ND	39	ug/kg

<b>SURROGATE</b>	<b>PERCENT</b>	<b>RECOVERY</b>	
		<b>RECOVERY</b>	<b>LIMITS</b>
Tetrachloro-m-xylene	75	(10 - 196)	
Decachlorobiphenyl	117	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

**Environmental Quality Mgt., Inc.**

**Client Sample ID:** [REDACTED] HARPER-SB04(0-3')

**General Chemistry**

**Lot-Sample #....:** A0D150506-007    **Work Order #....:** LX1XT                **Matrix.....:** SO  
**Date Sampled....:** 04/13/10 15:40    **Date Received..:** 04/15/10  
**% Moisture.....:** 15

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
					<u>ANALYSIS DATE</u>	<u>BATCH #</u>
<b>Percent Solids</b>	<b>84.8</b>	<b>10.0</b>	<b>%</b>	<b>MCAWW 160.3 MOD</b>	<b>04/16-04/19/10</b>	<b>0106322</b>

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] HARPER-SB04(9-10.5')

GC Semivolatiles

Lot-Sample #....: A0D150506-008 Work Order #....: LX1XV1AC Matrix.....: SO  
Date Sampled....: 04/13/10 15:45 Date Received..: 04/15/10  
Prep Date.....: 04/16/10 Analysis Date..: 04/20/10  
Prep Batch #....: 0106035  
Dilution Factor: 1  
% Moisture.....: 12 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	38	ug/kg
Aroclor 1221	ND	38	ug/kg
Aroclor 1232	ND	38	ug/kg
Aroclor 1242	ND	38	ug/kg
Aroclor 1248	ND	38	ug/kg
Aroclor 1254	ND	38	ug/kg
Aroclor 1260	ND	38	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	74	(10 - 196)	
Decachlorobiphenyl	74	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] HARPER-SB04(9-10.5')

General Chemistry

Lot-Sample #....: A0D150506-008    Work Order #....: LX1XV              Matrix.....: SO  
Date Sampled....: 04/13/10 15:45    Date Received..: 04/15/10  
% Moisture.....: 12

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	ANALYSIS DATE	BATCH #
Percent Solids	87.5	10.0	%	MCAWW 160.3 MOD	04/16-04/19/10	0106322

Dilution Factor: 1

**Environmental Quality Mgt., Inc.**

**Client Sample ID:** [REDACTED] HARPER-SB05(2-3')

**GC Semivolatiles**

**Lot-Sample #....:** A0D150506-009    **Work Order #....:** LX1XW1AC    **Matrix.....:** SO  
**Date Sampled....:** 04/13/10 15:50    **Date Received..:** 04/15/10  
**Prep Date.....:** 04/16/10    **Analysis Date..:** 04/20/10  
**Prep Batch #....:** 0106035  
**Dilution Factor:** 1  
**% Moisture.....:** 15    **Method.....:** SW846 8082

<b>PARAMETER</b>	<b>RESULT</b>	<b>REPORTING</b>	
		<b>LIMIT</b>	<b>UNITS</b>
Aroclor 1016	ND	39	ug/kg
Aroclor 1221	ND	39	ug/kg
Aroclor 1232	ND	39	ug/kg
Aroclor 1242	ND	39	ug/kg
Aroclor 1248	ND	39	ug/kg
Aroclor 1254	ND	39	ug/kg
Aroclor 1260	ND	39	ug/kg

<b>SURROGATE</b>	<b>RECOVERY</b>	<b>RECOVERY</b>	
		<b>LIMITS</b>	
Tetrachloro-m-xylene	70	(10 - 196)	
Decachlorobiphenyl	65	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

**Environmental Quality Mgt., Inc.**

**Client Sample ID:** [REDACTED] HARPER-SB05(2-3')

**General Chemistry**

**Lot-Sample #....:** A0D150506-009    **Work Order #....:** LX1XW                **Matrix.....:** SO  
**Date Sampled....:** 04/13/10 15:50    **Date Received..:** 04/15/10  
**% Moisture.....:** 15

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
					<u>ANALYSIS DATE</u>	<u>BATCH #</u>
<b>Percent Solids</b>	<b>85.4</b>	<b>10.0</b>	<b>%</b>	<b>MCAWW 160.3 MOD</b>	<b>04/16-04/19/10</b>	<b>0106322</b>

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] HARPER-SB05(9-10.5')

GC Semivolatiles

Lot-Sample #....: A0D150506-010 Work Order #....: LX1XX1AC Matrix.....: SO  
Date Sampled....: 04/13/10 15:55 Date Received..: 04/15/10  
Prep Date.....: 04/16/10 Analysis Date..: 04/20/10  
Prep Batch #....: 0106035  
Dilution Factor: 1  
% Moisture.....: 11 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	37	ug/kg
Aroclor 1221	ND	37	ug/kg
Aroclor 1232	ND	37	ug/kg
Aroclor 1242	ND	37	ug/kg
Aroclor 1248	ND	37	ug/kg
Aroclor 1254	ND	37	ug/kg
Aroclor 1260	ND	37	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	36	(10	- 196)
Decachlorobiphenyl	41	(10	- 199)

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] HARPER-SB05(9-10.5')

General Chemistry

Lot-Sample #....: A0D150506-010    Work Order #....: LX1XX                  Matrix.....: SO  
Date Sampled....: 04/13/10 15:55    Date Received..: 04/15/10  
% Moisture.....: 11

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	ANALYSIS DATE	BATCH #
Percent Solids	88.6	10.0	%	MCAWW 160.3 MOD	04/16-04/19/10	0106322

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] HARPER-RINSE

GC Semivolatiles

Lot-Sample #...: A0D150506-011 Work Order #...: LX1X01AA Matrix.....: WQ  
Date Sampled...: 04/13/10 17:00 Date Received..: 04/15/10  
Prep Date.....: 04/16/10 Analysis Date..: 04/19/10  
Prep Batch #...: 0106037  
Dilution Factor: 1 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	1.0	ug/L
Aroclor 1221	ND	1.0	ug/L
Aroclor 1232	ND	1.0	ug/L
Aroclor 1242	ND	1.0	ug/L
Aroclor 1248	ND	1.0	ug/L
Aroclor 1254	ND	1.0	ug/L
Aroclor 1260	ND	1.0	ug/L

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	89	(27 - 130)	
Decachlorobiphenyl	54	(10 - 127)	

**Environmental Quality Mgt., Inc.**

**Client Sample ID:** [REDACTED] HARPER-SB06(1-2')

**GC Semivolatiles**

**Lot-Sample #....:** A0D150506-012    **Work Order #....:** LX1X11AC    **Matrix.....:** SO  
**Date Sampled....:** 04/13/10 17:10    **Date Received..:** 04/15/10  
**Prep Date.....:** 04/16/10    **Analysis Date..:** 04/20/10  
**Prep Batch #....:** 0106035  
**Dilution Factor:** 1  
**% Moisture.....:** 19    **Method.....:** SW846 8082

<u>PARAMETER</u>	<u>RESULT</u>	REPORTING	
		<u>LIMIT</u>	<u>UNITS</u>
Aroclor 1016	ND	41	ug/kg
Aroclor 1221	ND	41	ug/kg
Aroclor 1232	ND	41	ug/kg
Aroclor 1242	ND	41	ug/kg
Aroclor 1248	ND	41	ug/kg
Aroclor 1254	ND	41	ug/kg
Aroclor 1260	ND	41	ug/kg

<u>SURROGATE</u>	<u>RECOVERY</u>	PERCENT	RECOVERY
		<u>LIMITS</u>	
Tetrachloro-m-xylene	78	(10 - 196)	
Decachlorobiphenyl	71	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

**Environmental Quality Mgt., Inc.**

**Client Sample ID:** [REDACTED] HARPER-SB06(1-2')

**General Chemistry**

**Lot-Sample #....:** A0D150506-012    **Work Order #....:** LX1X1                **Matrix.....:** SO  
**Date Sampled....:** 04/13/10 17:10    **Date Received..:** 04/15/10  
**% Moisture.....:** 19

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
					<u>ANALYSIS DATE</u>	<u>BATCH #</u>
<b>Percent Solids</b>	<b>81.4</b>	<b>10.0</b>	<b>%</b>	<b>MCAWW 160.3 MOD</b>	<b>04/16-04/19/10</b>	<b>0106322</b>

Dilution Factor: 1

**Environmental Quality Mgt., Inc.**

**Client Sample ID:** [REDACTED] HARPER-SB06(3-4')

**GC Semivolatiles**

**Lot-Sample #....:** A0D150506-013    **Work Order #....:** LX1X21AC    **Matrix.....:** SO  
**Date Sampled....:** 04/13/10 17:15    **Date Received..:** 04/15/10  
**Prep Date.....:** 04/16/10    **Analysis Date..:** 04/20/10  
**Prep Batch #....:** 0106035  
**Dilution Factor:** 1  
**% Moisture.....:** 13    **Method.....:** SW846 8082

<b>PARAMETER</b>	<b>RESULT</b>	<b>REPORTING</b>	
		<b>LIMIT</b>	<b>UNITS</b>
Aroclor 1016	ND	38	ug/kg
Aroclor 1221	ND	38	ug/kg
Aroclor 1232	ND	38	ug/kg
Aroclor 1242	ND	38	ug/kg
Aroclor 1248	ND	38	ug/kg
Aroclor 1254	ND	38	ug/kg
Aroclor 1260	ND	38	ug/kg

<b>SURROGATE</b>	<b>RECOVERY</b>	<b>PERCENT</b>	<b>RECOVERY</b>
		<b>LIMITS</b>	
Tetrachloro-m-xylene	80	(10 - 196)	
Decachlorobiphenyl	80	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

**Environmental Quality Mgt., Inc.**

**Client Sample ID:** [REDACTED] HARPER-SB06(3-4')

**General Chemistry**

**Lot-Sample #....:** A0D150506-013    **Work Order #....:** LX1X2                **Matrix.....:** SO  
**Date Sampled....:** 04/13/10 17:15    **Date Received..:** 04/15/10  
**% Moisture.....:** 13

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
					<u>ANALYSIS DATE</u>	<u>BATCH #</u>
<b>Percent Solids</b>	<b>86.8</b>	<b>10.0</b>	<b>%</b>	<b>MCAWW 160.3 MOD</b>	<b>04/16-04/19/10</b>	<b>0106322</b>

Dilution Factor: 1

**ST. CLAIR SHORES  
BON BRAE REMOVAL SITE  
ST. CLAIR SHORES, MICHIGAN  
DATA VALIDATION REPORT**

**Date:** May 19, 2010

**Laboratory:** TestAmerica, North Canton, Ohio

**Laboratory Work Order #s:** A0D160509

**Data Validation Performed By:** Lisa Graczyk, Weston Solutions, Inc. (WESTON<sup>®</sup>) Superfund Technical and Response Team (START)

**Weston Work Order #:** 20405.012.001.0893.00

This data validation report has been prepared by WESTON START under the START III Region V contract. This report documents the data validation for one rinsate blank and eleven soil samples that were collected for the St. Clair Shores Bon Brae Removal Site that was analyzed for polychlorinated biphenyls (PCB) using U.S. Environmental Protection Agency (U.S. EPA) SW-846 Method 8082.

A quality assurance (QA) level II data package was received from TestAmerica. Note that the QA Level II data package does not contain chromatograms and instrument printouts. The data validation was conducted in general accordance with the U.S. EPA "Contract Laboratory Program National Functional Guidance for Superfund Organic Methods Data Review" dated June 2008. The attachment contains the results summary sheets.

**PCBs BY U.S. EPA SW-846 METHOD 8082**

**1. Samples**

The following table summarizes the samples for which this data validation was conducted.

<b>Samples</b>	<b>Lab ID</b>	<b>Matrix</b>	<b>Date Collected</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>
BON BRAE-SB01(3-4)	A0D160509-001	Soil	4/14/2010	4/19/2010	4/22/2010
BON BRAE-SB01(14-15)	A0D160509-002	Soil	4/14/2010	4/19/2010	4/22/2010
HARPER-SB01(0-3)	A0D160509-003	Soil	4/14/2010	4/19/2010	4/22/2010
HARPER-SB01(8-9)	A0D160509-004	Soil	4/14/2010	4/19/2010	4/22/2010
BON BRAE-SB02(2-3)	A0D160509-005	Soil	4/14/2010	4/19/2010	4/22/2010
BON BRAE-SB02(6-7)	A0D160509-006	Soil	4/14/2010	4/19/2010	4/22/2010
HARPER-SB01(1-2)	A0D160509-007	Soil	4/14/2010	4/19/2010	4/22/2010
HARPER-SB01(4-6)	A0D160509-008	Soil	4/14/2010	4/19/2010	4/22/2010
HARPER-SB01(4-6)D	A0D160509-009	Soil	4/14/2010	4/19/2010	4/22/2010
HARPER-SB02(5-6)	A0D160509-010	Soil	4/14/2010	4/19/2010	4/22/2010
HARPER-SB02(7-9)	A0D160509-011	Soil	4/14/2010	4/19/2010	4/22/2010
HARPER-RINSE	A0D160509-012	Water	4/14/2010	4/17/2010	4/20/2010

Data Validation Report  
St. Clair Shores Bon Brae Removal Site  
TestAmerica  
Laboratory Work Order #: A0D160509

**2. Holding Times**

The samples were analyzed within the required holding time limit of 14 days from sample collection to extraction and 40 days from extraction to analysis for soil samples; and 7 days from sample collection to extraction and 40 days from extraction to analysis for water samples.

**3. Blanks**

A method blank was analyzed with the sample as required and was free of target compound contamination above the reporting limit.

**4. Surrogates**

The surrogate recoveries were within the laboratory-established quality control (QC) limits for percent recovery.

**5. Laboratory Control Sample (LCS) Results**

The LCS and LCS duplicate recoveries and relative percent differences (RPD) were within the laboratory-established QC limits.

**6. Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Results**

The MS and MSD recoveries and RPDs were within the laboratory-established QC limits.

**7. Overall Assessment**

The data are acceptable for use. No qualifications were required based on the information received.

Data Validation Report  
St. Clair Shores Bon Brae Removal Site  
TestAmerica  
Laboratory Work Order #: A0D160509

**ATTACHMENT**

**TESTAMERICA  
RESULTS SUMMARY**

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] BON BRAE-SB01(3-4)

GC Semivolatiles

Lot-Sample #....: A0D160509-001 Work Order #....: LX35X1AC Matrix.....: SO  
Date Sampled....: 04/14/10 10:25 Date Received..: 04/16/10  
Prep Date.....: 04/19/10 Analysis Date..: 04/22/10  
Prep Batch #....: 0109051  
Dilution Factor: 1  
% Moisture.....: 16 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	39	ug/kg
Aroclor 1221	ND	39	ug/kg
Aroclor 1232	ND	39	ug/kg
Aroclor 1242	ND	39	ug/kg
Aroclor 1248	ND	39	ug/kg
Aroclor 1254	ND	39	ug/kg
Aroclor 1260	ND	39	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	78	(10 - 196)	
Decachlorobiphenyl	87	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] BON BRAE-SB01(3-4)

General Chemistry

Lot-Sample #....: A0D160509-001    Work Order #....: LX35X              Matrix.....: SO  
Date Sampled....: 04/14/10 10:25    Date Received..: 04/16/10  
% Moisture.....: 16

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	84.4	10.0	%	MCAWW 160.3 MOD	04/20-04/21/10	0110200

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] BON BRAE-SB01(14-15)

GC Semivolatiles

Lot-Sample #....: A0D160509-002 Work Order #....: LX3521AC Matrix.....: SO  
Date Sampled....: 04/14/10 10:40 Date Received..: 04/16/10  
Prep Date.....: 04/19/10 Analysis Date..: 04/22/10  
Prep Batch #....: 0109051  
Dilution Factor: 1  
% Moisture.....: 17 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	40	ug/kg
Aroclor 1221	ND	40	ug/kg
Aroclor 1232	ND	40	ug/kg
Aroclor 1242	ND	40	ug/kg
<b>Aroclor 1248</b>	<b>83</b>	<b>40</b>	<b>ug/kg</b>
Aroclor 1254	ND	40	ug/kg
Aroclor 1260	ND	40	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	72	(10 - 196)	
Decachlorobiphenyl	78	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] BON BRAE-SB01(14-15)

General Chemistry

Lot-Sample #....: A0D160509-002    Work Order #....: LX352                  Matrix.....: SO  
Date Sampled....: 04/14/10 10:40    Date Received..: 04/16/10  
% Moisture.....: 17

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	ANALYSIS DATE	BATCH #
Percent Solids	83.5	10.0	%	MCAWW 160.3 MOD	04/20-04/21/10	0110200

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] HARPER-SB01(0-3)

GC Semivolatiles

Lot-Sample #....: A0D160509-003 Work Order #....: LX3541AC Matrix.....: SO  
Date Sampled....: 04/14/10 12:00 Date Received..: 04/16/10  
Prep Date.....: 04/19/10 Analysis Date..: 04/22/10  
Prep Batch #....: 0109051  
Dilution Factor: 1  
% Moisture.....: 13 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	38	ug/kg
Aroclor 1221	ND	38	ug/kg
Aroclor 1232	ND	38	ug/kg
Aroclor 1242	ND	38	ug/kg
Aroclor 1248	ND	38	ug/kg
<b>Aroclor 1254</b>	<b>150</b>	<b>38</b>	<b>ug/kg</b>
Aroclor 1260	ND	38	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	70	(10 - 196)	
Decachlorobiphenyl	67	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] HARPER-SB01(0-3)

General Chemistry

Lot-Sample #....: A0D160509-003    Work Order #....: LX354                  Matrix.....: SO  
Date Sampled....: 04/14/10 12:00    Date Received..: 04/16/10  
% Moisture.....: 13

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	87.4	10.0	%	MCAWW 160.3 MOD	04/20-04/21/10	0110200

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] HARPER-SB01(8-9)

GC Semivolatiles

Lot-Sample #....: A0D160509-004 Work Order #....: LX3561AC Matrix.....: SO  
Date Sampled....: 04/14/10 12:05 Date Received..: 04/16/10  
Prep Date.....: 04/19/10 Analysis Date..: 04/22/10  
Prep Batch #....: 0109051  
Dilution Factor: 1  
% Moisture.....: 22 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	42	ug/kg
Aroclor 1221	ND	42	ug/kg
Aroclor 1232	ND	42	ug/kg
Aroclor 1242	ND	42	ug/kg
Aroclor 1248	ND	42	ug/kg
Aroclor 1254	ND	42	ug/kg
Aroclor 1260	ND	42	ug/kg

SURROGATE	RECOVERY	RECOVERY	
		LIMITS	
Tetrachloro-m-xylene	76	(10	- 196)
Decachlorobiphenyl	67	(10	- 199)

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] HARPER-SB01(8-9)

General Chemistry

Lot-Sample #....: A0D160509-004    Work Order #....: LX356                  Matrix.....: SO  
Date Sampled....: 04/14/10 12:05    Date Received..: 04/16/10  
% Moisture.....: 22

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	78.2	10.0	%	MCAWW 160.3 MOD	04/20-04/21/10	0110200

Dilution Factor: 1

## Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] BON BRAE-SB02(2-3)

## GC Semivolatiles

Lot-Sample #....: A0D160509-005 Work Order #....: LX3571AC Matrix.....: SO  
Date Sampled....: 04/14/10 15:00 Date Received..: 04/16/10  
Prep Date.....: 04/19/10 Analysis Date..: 04/22/10  
Prep Batch #....: 0109051  
Dilution Factor: 1  
% Moisture.....: 24 Method.....: SW846 8082

<u>PARAMETER</u>	<u>RESULT</u>	REPORTING	
		<u>LIMIT</u>	<u>UNITS</u>
Aroclor 1016	ND	44	ug/kg
Aroclor 1221	ND	44	ug/kg
Aroclor 1232	ND	44	ug/kg
Aroclor 1242	ND	44	ug/kg
Aroclor 1248	ND	44	ug/kg
<b>Aroclor 1254</b>	<b>170</b>	<b>44</b>	<b>ug/kg</b>
Aroclor 1260	ND	44	ug/kg

<u>SURROGATE</u>	<u>PERCENT</u>	RECOVERY	
		<u>RECOVERY</u>	<u>LIMITS</u>
Tetrachloro-m-xylene	71	(10 - 196)	
Decachlorobiphenyl	78	(10 - 199)	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] BON BRAE-SB02(2-3)

General Chemistry

Lot-Sample #....: A0D160509-005    Work Order #....: LX357                  Matrix.....: SO  
Date Sampled....: 04/14/10 15:00    Date Received..: 04/16/10  
% Moisture.....: 24

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	ANALYSIS DATE	BATCH #
Percent Solids	75.8	10.0	%	MCAWW 160.3 MOD	04/20-04/21/10	0110200

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] BON BRAE-SB02(6-7)

GC Semivolatiles

Lot-Sample #....: A0D160509-006 Work Order #....: LX36A1AC Matrix.....: SO  
Date Sampled....: 04/14/10 15:05 Date Received..: 04/16/10  
Prep Date.....: 04/19/10 Analysis Date..: 04/22/10  
Prep Batch #....: 0109051  
Dilution Factor: 1  
% Moisture.....: 30 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	47	ug/kg
Aroclor 1221	ND	47	ug/kg
Aroclor 1232	ND	47	ug/kg
Aroclor 1242	ND	47	ug/kg
Aroclor 1248	ND	47	ug/kg
Aroclor 1254	ND	47	ug/kg
Aroclor 1260	ND	47	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	79	(10 - 196)	
Decachlorobiphenyl	83	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] BON BRAE-SB02(6-7)

General Chemistry

Lot-Sample #....: A0D160509-006    Work Order #....: LX36A                  Matrix.....: SO  
Date Sampled....: 04/14/10 15:05    Date Received..: 04/16/10  
% Moisture.....: 30

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	70.3	10.0	%	MCAWW 160.3 MOD	04/20-04/21/10	0110200

Dilution Factor: 1

**Environmental Quality Mgt., Inc.**

**Client Sample ID:** [REDACTED] HARPER-SB01(1-2)

**GC Semivolatiles**

**Lot-Sample #....:** A0D160509-007    **Work Order #....:** LX36D1AC    **Matrix.....:** SO  
**Date Sampled....:** 04/14/10 16:10    **Date Received..:** 04/16/10  
**Prep Date.....:** 04/19/10    **Analysis Date..:** 04/22/10  
**Prep Batch #....:** 0109051  
**Dilution Factor:** 1  
**% Moisture.....:** 18    **Method.....:** SW846 8082

<b>PARAMETER</b>	<b>RESULT</b>	<b>REPORTING</b>	
		<b>LIMIT</b>	<b>UNITS</b>
Aroclor 1016	ND	40	ug/kg
Aroclor 1221	ND	40	ug/kg
Aroclor 1232	ND	40	ug/kg
Aroclor 1242	ND	40	ug/kg
Aroclor 1248	ND	40	ug/kg
Aroclor 1254	ND	40	ug/kg
Aroclor 1260	ND	40	ug/kg

<b>SURROGATE</b>	<b>RECOVERY</b>	<b>PERCENT</b>	<b>RECOVERY</b>
		<b>LIMITS</b>	
Tetrachloro-m-xylene	78	(10 - 196)	
Decachlorobiphenyl	83	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] HARPER-SB01(1-2)

General Chemistry

Lot-Sample #....: A0D160509-007    Work Order #....: LX36D                  Matrix.....: SO  
Date Sampled....: 04/14/10 16:10    Date Received..: 04/16/10  
% Moisture.....: 18

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	81.5	10.0	%	MCAWW 160.3 MOD	04/20-04/21/10	0110200

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] HARPER-SB01(4-6)

GC Semivolatiles

Lot-Sample #....: A0D160509-008 Work Order #....: LX36H1AC Matrix.....: SO  
Date Sampled....: 04/14/10 16:15 Date Received..: 04/16/10  
Prep Date.....: 04/19/10 Analysis Date..: 04/22/10  
Prep Batch #....: 0109051  
Dilution Factor: 1  
% Moisture.....: 22 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	42	ug/kg
Aroclor 1221	ND	42	ug/kg
Aroclor 1232	ND	42	ug/kg
Aroclor 1242	ND	42	ug/kg
Aroclor 1248	ND	42	ug/kg
Aroclor 1254	ND	42	ug/kg
Aroclor 1260	ND	42	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	73	(10 - 196)	
Decachlorobiphenyl	79	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] HARPER-SB01(4-6)

General Chemistry

Lot-Sample #....: A0D160509-008    Work Order #....: LX36H                  Matrix.....: SO  
Date Sampled....: 04/14/10 16:15    Date Received..: 04/16/10  
% Moisture.....: 22

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	77.7	10.0	%	MCAWW 160.3 MOD	04/20-04/21/10	0110200

Dilution Factor: 1

**Environmental Quality Mgt., Inc.**

**Client Sample ID:** [REDACTED] HARPER-SB01(4-6)D

**GC Semivolatiles**

**Lot-Sample #....:** A0D160509-009    **Work Order #....:** LX36J1AC    **Matrix.....:** SO  
**Date Sampled....:** 04/14/10 16:15    **Date Received..:** 04/16/10  
**Prep Date.....:** 04/19/10    **Analysis Date..:** 04/22/10  
**Prep Batch #....:** 0109051  
**Dilution Factor:** 1  
**% Moisture.....:** 28    **Method.....:** SW846 8082

<b>PARAMETER</b>	<b>RESULT</b>	<b>REPORTING</b>	
		<b>LIMIT</b>	<b>UNITS</b>
Aroclor 1016	ND	46	ug/kg
Aroclor 1221	ND	46	ug/kg
Aroclor 1232	ND	46	ug/kg
Aroclor 1242	ND	46	ug/kg
Aroclor 1248	ND	46	ug/kg
Aroclor 1254	ND	46	ug/kg
Aroclor 1260	ND	46	ug/kg

<b>SURROGATE</b>	<b>RECOVERY</b>	<b>PERCENT</b>	<b>RECOVERY</b>
		<b>LIMITS</b>	
Tetrachloro-m-xylene	78	(10 - 196)	
Decachlorobiphenyl	73	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] HARPER-SB01(4-6)D

General Chemistry

Lot-Sample #....: A0D160509-009    Work Order #....: LX36J              Matrix.....: SO  
Date Sampled....: 04/14/10 16:15    Date Received..: 04/16/10  
% Moisture.....: 28

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
					<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	72.0	10.0	%	MCAWW 160.3 MOD	04/20-04/21/10	0110202
		Dilution Factor:	1			

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] HARPER-SB02(5-6)

GC Semivolatiles

Lot-Sample #....: A0D160509-010 Work Order #....: LX36M1AC Matrix.....: SO  
Date Sampled....: 04/14/10 16:40 Date Received..: 04/16/10  
Prep Date.....: 04/19/10 Analysis Date..: 04/22/10  
Prep Batch #....: 0109051  
Dilution Factor: 1  
% Moisture.....: 22 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	42	ug/kg
Aroclor 1221	ND	42	ug/kg
Aroclor 1232	ND	42	ug/kg
Aroclor 1242	ND	42	ug/kg
Aroclor 1248	ND	42	ug/kg
Aroclor 1254	ND	42	ug/kg
Aroclor 1260	ND	42	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	70	(10 - 196)	
Decachlorobiphenyl	79	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] HARPER-SB02(5-6)

General Chemistry

Lot-Sample #....: A0D160509-010    Work Order #....: LX36M                  Matrix.....: SO  
Date Sampled....: 04/14/10 16:40    Date Received..: 04/16/10  
% Moisture.....: 22

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	78.2	10.0	%	MCAWW 160.3 MOD	04/20-04/21/10	0110202

Dilution Factor: 1

**Environmental Quality Mgt., Inc.**

**Client Sample ID:** [REDACTED] HARPER-SB02(7-9)

**GC Semivolatiles**

**Lot-Sample #....:** A0D160509-011    **Work Order #....:** LX36Q1AC    **Matrix.....:** SO  
**Date Sampled....:** 04/14/10 16:45    **Date Received..:** 04/16/10  
**Prep Date.....:** 04/19/10    **Analysis Date..:** 04/22/10  
**Prep Batch #....:** 0109051  
**Dilution Factor:** 1  
**% Moisture.....:** 21    **Method.....:** SW846 8082

<b>PARAMETER</b>	<b>RESULT</b>	<b>REPORTING</b>	
		<b>LIMIT</b>	<b>UNITS</b>
Aroclor 1016	ND	42	ug/kg
Aroclor 1221	ND	42	ug/kg
Aroclor 1232	ND	42	ug/kg
Aroclor 1242	ND	42	ug/kg
Aroclor 1248	ND	42	ug/kg
Aroclor 1254	ND	42	ug/kg
Aroclor 1260	ND	42	ug/kg

<b>SURROGATE</b>	<b>RECOVERY</b>	<b>PERCENT</b>	<b>RECOVERY</b>
		<b>LIMITS</b>	
Tetrachloro-m-xylene	74	(10 - 196)	
Decachlorobiphenyl	84	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] HARPER-SB02(7-9)

General Chemistry

Lot-Sample #....: A0D160509-011    Work Order #....: LX36Q              Matrix.....: SO  
Date Sampled....: 04/14/10 16:45    Date Received..: 04/16/10  
% Moisture.....: 21

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	78.8	10.0	%	MCAWW 160.3 MOD	04/20-04/21/10	0110202

Dilution Factor: 1

**Environmental Quality Mgt., Inc.**

**Client Sample ID:** [REDACTED] HARPER-RINSE

**GC Semivolatiles**

**Lot-Sample #....:** A0D160509-012    **Work Order #....:** LX36T1AA    **Matrix.....:** WQ  
**Date Sampled....:** 04/14/10 16:50    **Date Received..:** 04/16/10  
**Prep Date.....:** 04/17/10    **Analysis Date..:** 04/20/10  
**Prep Batch #....:** 0107011  
**Dilution Factor:** 1    **Method.....:** SW846 8082

<b>PARAMETER</b>	<b>RESULT</b>	<b>REPORTING</b>	
		<b>LIMIT</b>	<b>UNITS</b>
Aroclor 1016	ND	1.0	ug/L
Aroclor 1221	ND	1.0	ug/L
Aroclor 1232	ND	1.0	ug/L
Aroclor 1242	ND	1.0	ug/L
Aroclor 1248	ND	1.0	ug/L
Aroclor 1254	ND	1.0	ug/L
Aroclor 1260	ND	1.0	ug/L

<b>SURROGATE</b>	<b>RECOVERY</b>	<b>PERCENT</b>	<b>RECOVERY</b>
		<b>LIMITS</b>	
Tetrachloro-m-xylene	73	(27 - 130)	
Decachlorobiphenyl	47	(10 - 127)	

**ST. CLAIR SHORES  
BON BRAE REMOVAL SITE  
ST. CLAIR SHORES, MICHIGAN  
DATA VALIDATION REPORT**

**Date:** May 20, 2010

**Laboratory:** TestAmerica, North Canton, Ohio

**Laboratory Work Order #s:** A0D170469

**Data Validation Performed By:** Lisa Graczyk, Weston Solutions, Inc. (WESTON<sup>®</sup>) Superfund Technical and Response Team (START)

**Weston Work Order #:** 20405.012.001.0893.00

This data validation report has been prepared by WESTON START under the START III Region V contract. This report documents the data validation for two rinsate blanks and thirty-two soil samples that were collected for the St. Clair Shores Bon Brae Removal Site that was analyzed for polychlorinated biphenyls (PCB) using U.S. Environmental Protection Agency (U.S. EPA) SW-846 Method 8082.

A quality assurance (QA) level II data package was received from TestAmerica. Note that the QA Level II data package does not contain chromatograms and instrument printouts. The data validation was conducted in general accordance with the U.S. EPA "Contract Laboratory Program National Functional Guidance for Superfund Organic Methods Data Review" dated June 2008. The attachment contains the results summary sheets.

**PCBs BY U.S. EPA SW-846 METHOD 8082**

**1. Samples**

The following table summarizes the samples for which this data validation was conducted.

<b>Samples</b>	<b>Lab ID</b>	<b>Matrix</b>	<b>Date Collected</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>
SB01(1-3)	A0D170469-001	Soil	4/15/2010	4/21/2010	4/26/2010
SB01(13-14)	A0D170469-002	Soil	4/15/2010	4/21/2010	4/26/2010
SB02(0-1.5)	A0D170469-003	Soil	4/15/2010	4/21/2010	4/26/2010
SB02(12-13)	A0D170469-004	Soil	4/15/2010	4/21/2010	4/26/2010
SB03(3-4)	A0D170469-005	Soil	4/15/2010	4/21/2010	4/26/2010
SB03(12-13)	A0D170469-006	Soil	4/15/2010	4/21/2010	4/26/2010
SB03(12-13)D	A0D170469-007	Soil	4/15/2010	4/21/2010	4/26/2010
SB04(3-4)	A0D170469-008	Soil	4/15/2010	4/21/2010	4/26/2010
SB04(7-8)	A0D170469-009	Soil	4/15/2010	4/21/2010	4/26/2010
SB05(0-3)	A0D170469-010	Soil	4/15/2010	4/21/2010	4/26/2010
SB05(9-10)	A0D170469-011	Soil	4/15/2010	4/21/2010	4/26/2010
SB06(3-4)	A0D170469-012	Soil	4/15/2010	4/21/2010	4/26/2010

Data Validation Report  
St. Clair Shores Bon Brae Removal Site  
TestAmerica  
Laboratory Work Order #: A0D170469

Samples	Lab ID	Matrix	Date Collected	Date Prepared	Date Analyzed
SB06(9-10)	A0D170469-013	Soil	4/15/2010	4/21/2010	4/26/2010
SB07(2-3)	A0D170469-014	Soil	4/15/2010	4/21/2010	4/26/2010
SB07(3-5)	A0D170469-015	Soil	4/15/2010	4/21/2010	4/26/2010
SB07(0-2)	A0D170469-016	Soil	4/15/2010	4/21/2010	4/26/2010
SB08(0-2)	A0D170469-017	Soil	4/15/2010	4/21/2010	4/26/2010
SB08(2-3)	A0D170469-018	Soil	4/15/2010	4/21/2010	4/26/2010
SB08(2-3)D	A0D170469-019	Soil	4/15/2010	4/23/2010	4/27/2010
SB09(2-3)	A0D170469-020	Soil	4/15/2010	4/21/2010	4/26/2010
SB09(5-6)	A0D170469-021	Soil	4/15/2010	4/21/2010	4/26/2010
RINSE	A0D170469-022	Water	4/15/2010	4/22/2010	4/26/2010
SB01(2-3)	A0D170469-023	Soil	4/16/2010	4/21/2010	4/26/2010
SB01(9-11)	A0D170469-024	Soil	4/16/2010	4/21/2010	4/26/2010
SB01(9-11)D	A0D170469-025	Soil	4/16/2010	4/21/2010	4/26/2010
SB01(13-15)	A0D170469-026	Soil	4/16/2010	4/21/2010	4/26/2010
SB02(12-13.5)	A0D170469-027	Soil	4/16/2010	4/21/2010	4/26/2010
SB02(9-12)	A0D170469-028	Soil	4/16/2010	4/21/2010	4/26/2010
SB03(0-3)	A0D170469-029	Soil	4/16/2010	4/21/2010	4/26/2010
SB03(4-5)	A0D170469-030	Soil	4/16/2010	4/21/2010	4/26/2010
SB04(2-4)	A0D170469-031	Soil	4/16/2010	4/21/2010	4/26/2010
SB04(6-8)	A0D170469-032	Soil	4/16/2010	4/21/2010	4/26/2010
SB04(6-8)D	A0D170469-033	Soil	4/16/2010	4/21/2010	4/26/2010
RINSE	A0D170469-034	Water	4/16/2010	4/22/2010	4/26/2010

## 2. Holding Times

The samples were analyzed within the required holding time limit of 14 days from sample collection to extraction and 40 days from extraction to analysis for soil samples; and 7 days from sample collection to extraction and 40 days from extraction to analysis for water samples.

## 3. Blanks

Method blanks were analyzed with the samples as required and were free of target compound contamination above the reporting limit.

## 4. Surrogates

The surrogate recoveries were within the laboratory-established quality control (QC) limits for percent recovery except in two instances where the surrogates could not be recovered due to high dilutions required. No qualification is required in these instances.

Data Validation Report  
St. Clair Shores Bon Brae Removal Site  
TestAmerica  
Laboratory Work Order #: A0D170469

**5. Laboratory Control Sample (LCS) Results**

The LCS and LCS duplicate recoveries and relative percent differences (RPD) were within the laboratory-established QC limits.

**6. Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Results**

The MS and MSD recoveries and RPDs were within the laboratory-established QC limits.

**7. Field Duplicate Results**

There are three field duplicates associated with this work order which are identified with a "D" suffix. For two of the field duplicate pairs, all results were non-detect. For sample [REDACTED] SB01(9-11), the RPD between the field duplicate and its parent sample is 29 percent which indicates a fairly good correlation between the two results.

**8. Overall Assessment**

The data are acceptable for use. No qualifications were required based on the information received.

Data Validation Report  
St. Clair Shores Bon Brae Removal Site  
TestAmerica  
Laboratory Work Order #: A0D170469

**ATTACHMENT**

**TESTAMERICA  
RESULTS SUMMARY**

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 1-3)

GC Semivolatiles

Lot-Sample #....: A0D170469-001 Work Order #....: LX5R31AC Matrix.....: SO  
Date Sampled....: 04/15/10 09:50 Date Received..: 04/17/10  
Prep Date.....: 04/21/10 Analysis Date..: 04/26/10  
Prep Batch #....: 0111037  
Dilution Factor: 1  
% Moisture.....: 15 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	39	ug/kg
Aroclor 1221	ND	39	ug/kg
Aroclor 1232	ND	39	ug/kg
Aroclor 1242	ND	39	ug/kg
Aroclor 1248	ND	39	ug/kg
Aroclor 1254	ND	39	ug/kg
Aroclor 1260	ND	39	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	70	(10 - 196)	
Decachlorobiphenyl	77	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 1-3)

General Chemistry

Lot-Sample #....: A0D170469-001    Work Order #....: LX5R3                  Matrix.....: SO  
Date Sampled....: 04/15/10 09:50    Date Received..: 04/17/10  
% Moisture.....: 15

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	85.0	10.0	%	MCAWW 160.3 MOD	04/21-04/22/10	0111165

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 13-14)

GC Semivolatiles

Lot-Sample #....: A0D170469-002 Work Order #....: LX5R51AC Matrix.....: SO  
Date Sampled....: 04/15/10 09:55 Date Received..: 04/17/10  
Prep Date.....: 04/21/10 Analysis Date..: 04/26/10  
Prep Batch #....: 0111037  
Dilution Factor: 1  
% Moisture.....: 24 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	43	ug/kg
Aroclor 1221	ND	43	ug/kg
Aroclor 1232	ND	43	ug/kg
Aroclor 1242	ND	43	ug/kg
Aroclor 1248	ND	43	ug/kg
Aroclor 1254	ND	43	ug/kg
Aroclor 1260	ND	43	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	67	(10 - 196)	
Decachlorobiphenyl	74	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

**Environmental Quality Mgt., Inc.**

**Client Sample ID:** [REDACTED] 13-14)

**General Chemistry**

**Lot-Sample #....:** A0D170469-002    **Work Order #....:** LX5R5    **Matrix.....:** SO

**Date Sampled....:** 04/15/10 09:55    **Date Received..:** 04/17/10

**% Moisture.....:** 24

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
					<u>ANALYSIS DATE</u>	<u>BATCH #</u>
<b>Percent Solids</b>	<b>76.0</b>	<b>10.0</b>	<b>%</b>	<b>MCAWW 160.3 MOD</b>	<b>04/21-04/22/10</b>	<b>0111165</b>

Dilution Factor: 1

**Environmental Quality Mgt., Inc.**

**Client Sample ID:** [REDACTED] 0-1.5)

**GC Semivolatiles**

**Lot-Sample #....:** A0D170469-003    **Work Order #....:** LX5R61AC    **Matrix.....:** SO  
**Date Sampled....:** 04/15/10 10:10    **Date Received..:** 04/17/10  
**Prep Date.....:** 04/21/10    **Analysis Date..:** 04/26/10  
**Prep Batch #....:** 0111037  
**Dilution Factor:** 1  
**% Moisture.....:** 17    **Method.....:** SW846 8082

<b>PARAMETER</b>	<b>RESULT</b>	<b>REPORTING</b>	
		<b>LIMIT</b>	<b>UNITS</b>
Aroclor 1016	ND	40	ug/kg
Aroclor 1221	ND	40	ug/kg
Aroclor 1232	ND	40	ug/kg
Aroclor 1242	ND	40	ug/kg
Aroclor 1248	ND	40	ug/kg
Aroclor 1254	ND	40	ug/kg
Aroclor 1260	ND	40	ug/kg

<b>SURROGATE</b>	<b>PERCENT</b>	<b>RECOVERY</b>	
		<b>RECOVERY</b>	<b>LIMITS</b>
Tetrachloro-m-xylene	79	(10 - 196)	
Decachlorobiphenyl	72	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

**Environmental Quality Mgt., Inc.**

**Client Sample ID:** [REDACTED] 0-1.5)

**General Chemistry**

**Lot-Sample #....:** A0D170469-003    **Work Order #....:** LX5R6                    **Matrix.....:** SO  
**Date Sampled....:** 04/15/10 10:10    **Date Received..:** 04/17/10  
**% Moisture.....:** 17

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
					<u>ANALYSIS DATE</u>	<u>BATCH #</u>
<b>Percent Solids</b>	<b>83.1</b>	<b>10.0</b>	<b>%</b>	<b>MCAWW 160.3 MOD</b>	<b>04/21-04/22/10</b>	<b>0111165</b>

Dilution Factor: 1

**Environmental Quality Mgt., Inc.**

**Client Sample ID:** [REDACTED] 12-13)

**GC Semivolatiles**

**Lot-Sample #....:** A0D170469-004    **Work Order #....:** LX5R71AC    **Matrix.....:** SO  
**Date Sampled....:** 04/15/10 10:15    **Date Received..:** 04/17/10  
**Prep Date.....:** 04/21/10    **Analysis Date..:** 04/26/10  
**Prep Batch #....:** 0111037  
**Dilution Factor:** 1  
**% Moisture.....:** 16    **Method.....:** SW846 8082

<b>PARAMETER</b>	<b>RESULT</b>	<b>REPORTING</b>	
		<b>LIMIT</b>	<b>UNITS</b>
Aroclor 1016	ND	39	ug/kg
Aroclor 1221	ND	39	ug/kg
Aroclor 1232	ND	39	ug/kg
Aroclor 1242	ND	39	ug/kg
Aroclor 1248	ND	39	ug/kg
Aroclor 1254	ND	39	ug/kg
Aroclor 1260	ND	39	ug/kg

<b>SURROGATE</b>	<b>PERCENT</b>	<b>RECOVERY</b>	
		<b>RECOVERY</b>	<b>LIMITS</b>
Tetrachloro-m-xylene	56	(10 - 196)	
Decachlorobiphenyl	59	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 12-13)

General Chemistry

Lot-Sample #....: A0D170469-004 Work Order #....: LX5R7 Matrix.....: SO

Date Sampled....: 04/15/10 10:15 Date Received..: 04/17/10

% Moisture.....: 16

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
					<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	83.6	10.0	%	MCAWW 160.3 MOD	04/21-04/22/10	0111165

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 3-4)

GC Semivolatiles

Lot-Sample #....: A0D170469-005 Work Order #....: LX5R81AC Matrix.....: SO  
Date Sampled....: 04/15/10 10:55 Date Received..: 04/17/10  
Prep Date.....: 04/21/10 Analysis Date..: 04/26/10  
Prep Batch #....: 0111037  
Dilution Factor: 1  
% Moisture.....: 24 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	44	ug/kg
Aroclor 1221	ND	44	ug/kg
Aroclor 1232	ND	44	ug/kg
Aroclor 1242	ND	44	ug/kg
Aroclor 1248	ND	44	ug/kg
Aroclor 1254	ND	44	ug/kg
Aroclor 1260	ND	44	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	74	(10	- 196)
Decachlorobiphenyl	76	(10	- 199)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 3-4)

General Chemistry

Lot-Sample #....: A0D170469-005 Work Order #....: LX5R8 Matrix.....: SO

Date Sampled....: 04/15/10 10:55 Date Received..: 04/17/10

% Moisture.....: 24

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
					<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	75.9	10.0	%	MCAWW 160.3 MOD	04/21-04/22/10	0111165

Dilution Factor: 1

**Environmental Quality Mgt., Inc.**

**Client Sample ID:** [REDACTED] 12-13)

**GC Semivolatiles**

**Lot-Sample #....:** A0D170469-006    **Work Order #....:** LX5R91AC    **Matrix.....:** SO  
**Date Sampled....:** 04/15/10 11:00    **Date Received..:** 04/17/10  
**Prep Date.....:** 04/21/10    **Analysis Date..:** 04/26/10  
**Prep Batch #....:** 0111037  
**Dilution Factor:** 1  
**% Moisture.....:** 14    **Method.....:** SW846 8082

<b>PARAMETER</b>	<b>RESULT</b>	<b>REPORTING</b>	
		<b>LIMIT</b>	<b>UNITS</b>
Aroclor 1016	ND	38	ug/kg
Aroclor 1221	ND	38	ug/kg
Aroclor 1232	ND	38	ug/kg
Aroclor 1242	ND	38	ug/kg
Aroclor 1248	ND	38	ug/kg
Aroclor 1254	ND	38	ug/kg
Aroclor 1260	ND	38	ug/kg

<b>SURROGATE</b>	<b>PERCENT</b>	<b>RECOVERY</b>	
		<b>RECOVERY</b>	<b>LIMITS</b>
Tetrachloro-m-xylene	63	(10 - 196)	
Decachlorobiphenyl	74	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 12-13)

General Chemistry

Lot-Sample #....: A0D170469-006 Work Order #....: LX5R9 Matrix.....: SO

Date Sampled....: 04/15/10 11:00 Date Received..: 04/17/10

% Moisture.....: 14

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
					<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	85.9	10.0	%	MCAWW 160.3 MOD	04/21-04/22/10	0111165

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 12-13)D

GC Semivolatiles

Lot-Sample #....: A0D170469-007 Work Order #....: LX5TA1AC Matrix.....: SO  
Date Sampled....: 04/15/10 11:00 Date Received..: 04/17/10  
Prep Date.....: 04/21/10 Analysis Date..: 04/26/10  
Prep Batch #....: 0111037  
Dilution Factor: 1  
% Moisture.....: 16 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	39	ug/kg
Aroclor 1221	ND	39	ug/kg
Aroclor 1232	ND	39	ug/kg
Aroclor 1242	ND	39	ug/kg
Aroclor 1248	ND	39	ug/kg
Aroclor 1254	ND	39	ug/kg
Aroclor 1260	ND	39	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	65	(10	- 196)
Decachlorobiphenyl	75	(10	- 199)

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 12-13)D

General Chemistry

Lot-Sample #....: A0D170469-007    Work Order #....: LX5TA                  Matrix.....: SO  
Date Sampled....: 04/15/10 11:00    Date Received..: 04/17/10  
% Moisture.....: 16

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	84.2	10.0	%	MCAWW 160.3 MOD	04/21-04/22/10	0111165

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 3-4)

GC Semivolatiles

Lot-Sample #....: A0D170469-008 Work Order #....: LX5TC1AC Matrix.....: SO  
Date Sampled....: 04/15/10 11:35 Date Received..: 04/17/10  
Prep Date.....: 04/21/10 Analysis Date..: 04/26/10  
Prep Batch #....: 0111037  
Dilution Factor: 1  
% Moisture.....: 25 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	44	ug/kg
Aroclor 1221	ND	44	ug/kg
Aroclor 1232	ND	44	ug/kg
Aroclor 1242	ND	44	ug/kg
Aroclor 1248	ND	44	ug/kg
Aroclor 1254	ND	44	ug/kg
Aroclor 1260	ND	44	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	64	(10 - 196)	
Decachlorobiphenyl	72	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 3-4)

General Chemistry

Lot-Sample #....: A0D170469-008    Work Order #....: LX5TC                      Matrix.....: SO  
Date Sampled....: 04/15/10 11:35    Date Received..: 04/17/10  
% Moisture.....: 25

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	75.4	10.0	%	MCAWW 160.3 MOD	04/21-04/22/10	0111165

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 7-8)

GC Semivolatiles

Lot-Sample #....: A0D170469-009 Work Order #....: LX5TD1AC Matrix.....: SO  
Date Sampled....: 04/15/10 11:40 Date Received..: 04/17/10  
Prep Date.....: 04/21/10 Analysis Date..: 04/26/10  
Prep Batch #....: 0111037  
Dilution Factor: 1  
% Moisture.....: 18 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	40	ug/kg
Aroclor 1221	ND	40	ug/kg
Aroclor 1232	ND	40	ug/kg
<b>Aroclor 1242</b>	<b>45</b>	<b>40</b>	<b>ug/kg</b>
Aroclor 1248	ND	40	ug/kg
Aroclor 1254	ND	40	ug/kg
Aroclor 1260	ND	40	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	64	(10 - 196)	
Decachlorobiphenyl	70	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 7-8)

General Chemistry

Lot-Sample #....: A0D170469-009    Work Order #....: LX5TD                      Matrix.....: SO  
Date Sampled....: 04/15/10 11:40    Date Received..: 04/17/10  
% Moisture.....: 18

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	81.7	10.0	%	MCAWW 160.3 MOD	04/21-04/22/10	0111165

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 0-3)

GC Semivolatiles

Lot-Sample #....: A0D170469-010 Work Order #....: LX5TE1AC Matrix.....: SO  
Date Sampled....: 04/15/10 12:55 Date Received..: 04/17/10  
Prep Date.....: 04/21/10 Analysis Date..: 04/26/10  
Prep Batch #....: 0111037  
Dilution Factor: 1  
% Moisture.....: 18 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	40	ug/kg
Aroclor 1221	ND	40	ug/kg
Aroclor 1232	ND	40	ug/kg
<b>Aroclor 1242</b>	<b>55</b>	<b>40</b>	<b>ug/kg</b>
Aroclor 1248	ND	40	ug/kg
Aroclor 1254	ND	40	ug/kg
Aroclor 1260	ND	40	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	63	(10 - 196)	
Decachlorobiphenyl	75	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 0-3)

General Chemistry

Lot-Sample #....: A0D170469-010    Work Order #....: LX5TE                  Matrix.....: SO  
Date Sampled....: 04/15/10 12:55    Date Received..: 04/17/10  
% Moisture.....: 18

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	81.9	10.0	%	MCAWW 160.3 MOD	04/21-04/22/10	0111165

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 9-10)

GC Semivolatiles

Lot-Sample #....: A0D170469-011 Work Order #....: LX5TF1AC Matrix.....: SO  
Date Sampled....: 04/15/10 13:00 Date Received..: 04/17/10  
Prep Date.....: 04/21/10 Analysis Date..: 04/26/10  
Prep Batch #....: 0111037  
Dilution Factor: 1  
% Moisture.....: 13 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	38	ug/kg
Aroclor 1221	ND	38	ug/kg
Aroclor 1232	ND	38	ug/kg
Aroclor 1242	ND	38	ug/kg
Aroclor 1248	ND	38	ug/kg
Aroclor 1254	ND	38	ug/kg
Aroclor 1260	ND	38	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	64	(10 - 196)	
Decachlorobiphenyl	63	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 9-10)

General Chemistry

Lot-Sample #....: A0D170469-011    Work Order #....: LX5TF                  Matrix.....: SO  
Date Sampled....: 04/15/10 13:00    Date Received..: 04/17/10  
% Moisture.....: 13

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	86.6	10.0	%	MCAWW 160.3 MOD	04/21-04/22/10	0111165

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 3-4)

GC Semivolatiles

Lot-Sample #....: A0D170469-012 Work Order #....: LX5TG1AC Matrix.....: SO  
Date Sampled....: 04/15/10 13:15 Date Received..: 04/17/10  
Prep Date.....: 04/21/10 Analysis Date..: 04/26/10  
Prep Batch #....: 0111037  
Dilution Factor: 1  
% Moisture.....: 30 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	47	ug/kg
Aroclor 1221	ND	47	ug/kg
Aroclor 1232	ND	47	ug/kg
Aroclor 1242	ND	47	ug/kg
Aroclor 1248	ND	47	ug/kg
Aroclor 1254	ND	47	ug/kg
Aroclor 1260	ND	47	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	69	(10	- 196)
Decachlorobiphenyl	77	(10	- 199)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 3-4)

General Chemistry

Lot-Sample #....: A0D170469-012    Work Order #....: LX5TG                      Matrix.....: SO  
Date Sampled....: 04/15/10 13:15    Date Received..: 04/17/10  
% Moisture.....: 30

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	70.1	10.0	%	MCAWW 160.3 MOD	04/21-04/22/10	0111165

Dilution Factor: 1

## Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 9-10)

## GC Semivolatiles

Lot-Sample #....: A0D170469-013 Work Order #....: LX5TH1AC Matrix.....: SO  
Date Sampled....: 04/15/10 13:17 Date Received..: 04/17/10  
Prep Date.....: 04/21/10 Analysis Date..: 04/26/10  
Prep Batch #....: 0111037  
Dilution Factor: 1  
% Moisture.....: 34 Method.....: SW846 8082

<u>PARAMETER</u>	<u>RESULT</u>	REPORTING	
		<u>LIMIT</u>	<u>UNITS</u>
Aroclor 1016	ND	50	ug/kg
Aroclor 1221	ND	50	ug/kg
Aroclor 1232	ND	50	ug/kg
<b>Aroclor 1242</b>	<b>26 J</b>	<b>50</b>	<b>ug/kg</b>
Aroclor 1248	ND	50	ug/kg
Aroclor 1254	ND	50	ug/kg
Aroclor 1260	ND	50	ug/kg

<u>SURROGATE</u>	<u>PERCENT</u>	RECOVERY	
		<u>RECOVERY</u>	<u>LIMITS</u>
Tetrachloro-m-xylene	67	(10 - 196)	
Decachlorobiphenyl	72	(10 - 199)	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 9-10)

General Chemistry

Lot-Sample #....: A0D170469-013    Work Order #....: LX5TH                  Matrix.....: SO  
Date Sampled....: 04/15/10 13:17    Date Received..: 04/17/10  
% Moisture.....: 34

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	65.9	10.0	%	MCAWW 160.3 MOD	04/21-04/22/10	0111165

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 2-3)

GC Semivolatiles

Lot-Sample #....: A0D170469-014 Work Order #....: LX5TJ1AC Matrix.....: SO  
Date Sampled....: 04/15/10 14:25 Date Received..: 04/17/10  
Prep Date.....: 04/21/10 Analysis Date..: 04/26/10  
Prep Batch #....: 0111042  
Dilution Factor: 1  
% Moisture.....: 29 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	47	ug/kg
Aroclor 1221	ND	47	ug/kg
Aroclor 1232	ND	47	ug/kg
Aroclor 1242	ND	47	ug/kg
Aroclor 1248	ND	47	ug/kg
Aroclor 1254	ND	47	ug/kg
Aroclor 1260	ND	47	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	76	(10 - 196)	
Decachlorobiphenyl	88	(10 - 199)	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 2-3)

General Chemistry

Lot-Sample #....: A0D170469-014    Work Order #....: LX5TJ                      Matrix.....: SO  
Date Sampled....: 04/15/10 14:25    Date Received..: 04/17/10  
% Moisture.....: 29

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	70.7	10.0	%	MCAWW 160.3 MOD	04/21-04/22/10	0111165

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 3-5)

GC Semivolatiles

Lot-Sample #....: A0D170469-015 Work Order #....: LX5TK1AC Matrix.....: SO  
Date Sampled....: 04/15/10 14:30 Date Received..: 04/17/10  
Prep Date.....: 04/21/10 Analysis Date..: 04/26/10  
Prep Batch #....: 0111042  
Dilution Factor: 1  
% Moisture.....: 22 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	43	ug/kg
Aroclor 1221	ND	43	ug/kg
Aroclor 1232	ND	43	ug/kg
Aroclor 1242	ND	43	ug/kg
Aroclor 1248	ND	43	ug/kg
Aroclor 1254	ND	43	ug/kg
Aroclor 1260	ND	43	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	56	(10 - 196)	
Decachlorobiphenyl	75	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 3-5)

General Chemistry

Lot-Sample #....: A0D170469-015    Work Order #....: LX5TK                      Matrix.....: SO  
Date Sampled....: 04/15/10 14:30    Date Received..: 04/17/10  
% Moisture.....: 22

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	ANALYSIS DATE	BATCH #
Percent Solids	77.6	10.0	%	MCAWW 160.3 MOD	04/21-04/22/10	0111165

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 0-2)

GC Semivolatiles

Lot-Sample #....: A0D170469-016 Work Order #....: LX5TM1AC Matrix.....: SO  
Date Sampled....: 04/15/10 14:20 Date Received..: 04/17/10  
Prep Date.....: 04/21/10 Analysis Date..: 04/26/10  
Prep Batch #....: 0111042  
Dilution Factor: 1  
% Moisture.....: 15 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	39	ug/kg
Aroclor 1221	ND	39	ug/kg
Aroclor 1232	ND	39	ug/kg
Aroclor 1242	ND	39	ug/kg
Aroclor 1248	ND	39	ug/kg
Aroclor 1254	ND	39	ug/kg
Aroclor 1260	ND	39	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	57	(10	- 196)
Decachlorobiphenyl	54	(10	- 199)

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 0-2)

General Chemistry

Lot-Sample #....: A0D170469-016 Work Order #....: LX5TM Matrix.....: SO

Date Sampled....: 04/15/10 14:20 Date Received..: 04/17/10

% Moisture.....: 15

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
					<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	84.6	10.0	%	MCAWW 160.3 MOD	04/21-04/22/10	0111165

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 0-2)

GC Semivolatiles

Lot-Sample #....: A0D170469-017 Work Order #....: LX5TN1AC Matrix.....: SO  
Date Sampled....: 04/15/10 15:00 Date Received..: 04/17/10  
Prep Date.....: 04/21/10 Analysis Date..: 04/26/10  
Prep Batch #....: 0111042  
Dilution Factor: 1  
% Moisture.....: 19 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	41	ug/kg
Aroclor 1221	ND	41	ug/kg
Aroclor 1232	ND	41	ug/kg
Aroclor 1242	ND	41	ug/kg
<b>Aroclor 1248</b>	<b>190</b>	<b>41</b>	<b>ug/kg</b>
Aroclor 1254	ND	41	ug/kg
Aroclor 1260	ND	41	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	72	(10 - 196)	
Decachlorobiphenyl	56	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 0-2)

General Chemistry

Lot-Sample #....: A0D170469-017    Work Order #....: LX5TN    Matrix.....: SO  
Date Sampled....: 04/15/10 15:00    Date Received..: 04/17/10  
% Moisture.....: 19

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS_DATE</u>	<u>BATCH #</u>
Percent Solids	80.9	10.0	%	MCAWW 160.3 MOD	04/21-04/22/10	0111165

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 2-3)

GC Semivolatiles

Lot-Sample #....: A0D170469-018 Work Order #....: LX5TP1AC Matrix.....: SO  
Date Sampled....: 04/15/10 15:05 Date Received..: 04/17/10  
Prep Date.....: 04/21/10 Analysis Date..: 04/26/10  
Prep Batch #....: 0111042  
Dilution Factor: 1  
% Moisture.....: 22 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	42	ug/kg
Aroclor 1221	ND	42	ug/kg
Aroclor 1232	ND	42	ug/kg
Aroclor 1242	ND	42	ug/kg
Aroclor 1248	ND	42	ug/kg
Aroclor 1254	ND	42	ug/kg
Aroclor 1260	ND	42	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	84	(10 - 196)	
Decachlorobiphenyl	85	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 2-3)

General Chemistry

Lot-Sample #....: A0D170469-018    Work Order #....: LX5TP                      Matrix.....: SO  
Date Sampled....: 04/15/10 15:05    Date Received..: 04/17/10  
% Moisture.....: 22

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	78.4	10.0	%	MCAWW 160.3 MOD	04/21-04/22/10	0111165

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 2-3)D

GC Semivolatiles

Lot-Sample #....: A0D170469-019 Work Order #....: LX5TQ1AC Matrix.....: SO  
Date Sampled....: 04/15/10 15:05 Date Received..: 04/17/10  
Prep Date.....: 04/23/10 Analysis Date..: 04/27/10  
Prep Batch #....: 0113045  
Dilution Factor: 1  
% Moisture.....: 20 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	41	ug/kg
Aroclor 1221	ND	41	ug/kg
Aroclor 1232	ND	41	ug/kg
Aroclor 1242	ND	41	ug/kg
Aroclor 1248	ND	41	ug/kg
Aroclor 1254	ND	41	ug/kg
Aroclor 1260	ND	41	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	52	(10 - 196)	
Decachlorobiphenyl	60	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 2-3)D

General Chemistry

Lot-Sample #....: A0D170469-019    Work Order #....: LX5TQ                Matrix.....: SO  
Date Sampled....: 04/15/10 15:05    Date Received..: 04/17/10  
% Moisture.....: 20

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
					<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	80.1	10.0	%	MCAWW 160.3 MOD	04/21-04/22/10	0111173
		Dilution Factor:	1			

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 2-3)

GC Semivolatiles

Lot-Sample #....: A0D170469-020 Work Order #....: LX5TR1AC Matrix.....: SO  
Date Sampled....: 04/15/10 15:40 Date Received..: 04/17/10  
Prep Date.....: 04/21/10 Analysis Date..: 04/26/10  
Prep Batch #....: 0111042  
Dilution Factor: 1  
% Moisture.....: 15 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	39	ug/kg
Aroclor 1221	ND	39	ug/kg
Aroclor 1232	ND	39	ug/kg
Aroclor 1242	ND	39	ug/kg
Aroclor 1248	ND	39	ug/kg
Aroclor 1254	ND	39	ug/kg
Aroclor 1260	ND	39	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	80	(10 - 196)	
Decachlorobiphenyl	75	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 2-3)

General Chemistry

Lot-Sample #....: A0D170469-020    Work Order #....: LX5TR                Matrix.....: SO  
Date Sampled....: 04/15/10 15:40    Date Received..: 04/17/10  
% Moisture.....: 15

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	84.6	10.0	%	MCAWW 160.3 MOD	04/21-04/22/10	0111173

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 5-6)

GC Semivolatiles

Lot-Sample #....: A0D170469-021 Work Order #....: LX5TV1AC Matrix.....: SO  
Date Sampled....: 04/15/10 15:45 Date Received..: 04/17/10  
Prep Date.....: 04/21/10 Analysis Date..: 04/26/10  
Prep Batch #....: 0111042  
Dilution Factor: 1  
% Moisture.....: 15 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	39	ug/kg
Aroclor 1221	ND	39	ug/kg
Aroclor 1232	ND	39	ug/kg
Aroclor 1242	ND	39	ug/kg
Aroclor 1248	ND	39	ug/kg
Aroclor 1254	ND	39	ug/kg
Aroclor 1260	ND	39	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	77	(10	- 196)
Decachlorobiphenyl	67	(10	- 199)

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 5-6)

General Chemistry

Lot-Sample #....: A0D170469-021    Work Order #....: LX5TV                      Matrix.....: SO  
Date Sampled....: 04/15/10 15:45    Date Received..: 04/17/10  
% Moisture.....: 15

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	84.7	10.0	%	MCAWW 160.3 MOD	04/21-04/22/10	0111173

Dilution Factor: 1

**Environmental Quality Mgt., Inc.**

**Client Sample ID:** [REDACTED] RINSE

**GC Semivolatiles**

**Lot-Sample #....:** A0D170469-022    **Work Order #....:** LX5TW1AA    **Matrix.....:** WQ  
**Date Sampled....:** 04/15/10 15:40    **Date Received..:** 04/17/10  
**Prep Date.....:** 04/22/10    **Analysis Date..:** 04/26/10  
**Prep Batch #....:** 0112038  
**Dilution Factor:** 1    **Method.....:** SW846 8082

<b>PARAMETER</b>	<b>RESULT</b>	<b>REPORTING</b>	
		<b>LIMIT</b>	<b>UNITS</b>
Aroclor 1016	ND	1.0	ug/L
Aroclor 1221	ND	1.0	ug/L
Aroclor 1232	ND	1.0	ug/L
Aroclor 1242	ND	1.0	ug/L
Aroclor 1248	ND	1.0	ug/L
Aroclor 1254	ND	1.0	ug/L
Aroclor 1260	ND	1.0	ug/L

<b>SURROGATE</b>	<b>PERCENT</b>	<b>RECOVERY</b>	
		<b>RECOVERY</b>	<b>LIMITS</b>
Tetrachloro-m-xylene	78	( 27 - 130 )	
Decachlorobiphenyl	29	( 10 - 127 )	

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 2-3)

GC Semivolatiles

Lot-Sample #....: A0D170469-023 Work Order #....: LX5T01AC Matrix.....: SO  
Date Sampled....: 04/16/10 09:05 Date Received..: 04/17/10  
Prep Date.....: 04/21/10 Analysis Date..: 04/26/10  
Prep Batch #....: 0111037  
Dilution Factor: 5  
% Moisture.....: 13 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	190	ug/kg
Aroclor 1221	ND	190	ug/kg
Aroclor 1232	ND	190	ug/kg
Aroclor 1242	ND	190	ug/kg
<b>Aroclor 1248</b>	<b>740</b>	<b>190</b>	<b>ug/kg</b>
Aroclor 1254	ND	190	ug/kg
Aroclor 1260	ND	190	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	71 DIL	(10 - 196)	
Decachlorobiphenyl	85 DIL	(10 - 199)	

**NOTE(S):**

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 2-3)

General Chemistry

Lot-Sample #....: A0D170469-023    Work Order #....: LX5T0                  Matrix.....: SO  
Date Sampled....: 04/16/10 09:05    Date Received..: 04/17/10  
% Moisture.....: 13

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	87.2	10.0	%	MCAWW 160.3 MOD	04/21-04/22/10	0111173

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 9-11)

GC Semivolatiles

Lot-Sample #....: A0D170469-024 Work Order #....: LX5T11AC Matrix.....: SO  
Date Sampled....: 04/16/10 09:10 Date Received..: 04/17/10  
Prep Date.....: 04/21/10 Analysis Date..: 04/26/10  
Prep Batch #....: 0111037  
Dilution Factor: 1000  
% Moisture.....: 17 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	40000	ug/kg
Aroclor 1221	ND	40000	ug/kg
Aroclor 1232	ND	40000	ug/kg
Aroclor 1242	ND	40000	ug/kg
<b>Aroclor 1248</b>	<b>350000</b>	<b>40000</b>	<b>ug/kg</b>
Aroclor 1254	ND	40000	ug/kg
Aroclor 1260	ND	40000	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	742 DIL,*	(10 - 196)	
Decachlorobiphenyl	0.0 DIL,*	(10 - 199)	

**NOTE(S):**

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

\* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 9-11)

General Chemistry

Lot-Sample #....: A0D170469-024    Work Order #....: LX5T1                  Matrix.....: SO  
Date Sampled....: 04/16/10 09:10    Date Received..: 04/17/10  
% Moisture.....: 17

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	83.1	10.0	%	MCAWW 160.3 MOD	04/21-04/22/10	0111173

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 9-11)D

GC Semivolatiles

Lot-Sample #....: A0D170469-025 Work Order #....: LX5T21AC Matrix.....: SO  
Date Sampled....: 04/16/10 09:10 Date Received..: 04/17/10  
Prep Date.....: 04/21/10 Analysis Date..: 04/26/10  
Prep Batch #....: 0111037  
Dilution Factor: 1000  
% Moisture.....: 18 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	40000	ug/kg
Aroclor 1221	ND	40000	ug/kg
Aroclor 1232	ND	40000	ug/kg
Aroclor 1242	ND	40000	ug/kg
<b>Aroclor 1248</b>	<b>260000</b>	<b>40000</b>	<b>ug/kg</b>
Aroclor 1254	ND	40000	ug/kg
Aroclor 1260	ND	40000	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	292 DIL,*	(10 - 196)	
Decachlorobiphenyl	213 DIL,*	(10 - 199)	

**NOTE(S):**

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

\* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

**Environmental Quality Mgt., Inc.**

**Client Sample ID:** [REDACTED] 9-11)D

**General Chemistry**

**Lot-Sample #....:** A0D170469-025    **Work Order #....:** LX5T2                **Matrix.....:** SO  
**Date Sampled....:** 04/16/10 09:10    **Date Received..:** 04/17/10  
**% Moisture.....:** 18

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
					<u>ANALYSIS DATE</u>	<u>BATCH #</u>
<b>Percent Solids</b>	<b>81.5</b>	<b>10.0</b>	<b>%</b>	<b>MCAWW 160.3 MOD</b>	<b>04/21-04/22/10</b>	<b>0111173</b>

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 13-15)

GC Semivolatiles

Lot-Sample #....: A0D170469-026 Work Order #....: LX5T31AC Matrix.....: SO  
Date Sampled....: 04/16/10 09:15 Date Received..: 04/17/10  
Prep Date.....: 04/21/10 Analysis Date..: 04/26/10  
Prep Batch #....: 0111037  
Dilution Factor: 5  
% Moisture.....: 21 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	210	ug/kg
Aroclor 1221	ND	210	ug/kg
Aroclor 1232	ND	210	ug/kg
<b>Aroclor 1242</b>	<b>590</b>	<b>210</b>	<b>ug/kg</b>
Aroclor 1248	ND	210	ug/kg
<b>Aroclor 1254</b>	<b>140 J</b>	<b>210</b>	<b>ug/kg</b>
Aroclor 1260	ND	210	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	82 DIL	(10 - 196)	
Decachlorobiphenyl	94 DIL	(10 - 199)	

**NOTE(S):**

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 13-15)

General Chemistry

Lot-Sample #....: A0D170469-026    Work Order #....: LX5T3                  Matrix.....: SO  
Date Sampled....: 04/16/10 09:15    Date Received..: 04/17/10  
% Moisture.....: 21

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	79.2	10.0	%	MCAWW 160.3 MOD	04/21-04/22/10	0111173

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 12-13.5)

GC Semivolatiles

Lot-Sample #....: A0D170469-027 Work Order #....: LX5T51AC Matrix.....: SO  
Date Sampled....: 04/16/10 09:50 Date Received..: 04/17/10  
Prep Date.....: 04/21/10 Analysis Date..: 04/26/10  
Prep Batch #....: 0111037  
Dilution Factor: 1  
% Moisture.....: 14 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	39	ug/kg
Aroclor 1221	ND	39	ug/kg
Aroclor 1232	ND	39	ug/kg
<b>Aroclor 1242</b>	<b>64</b>	<b>39</b>	<b>ug/kg</b>
Aroclor 1248	ND	39	ug/kg
Aroclor 1254	ND	39	ug/kg
Aroclor 1260	ND	39	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	68	(10 - 196)	
Decachlorobiphenyl	74	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 12-13.5)

General Chemistry

Lot-Sample #....: A0D170469-027    Work Order #....: LX5T5                  Matrix.....: SO  
Date Sampled....: 04/16/10 09:50    Date Received..: 04/17/10  
% Moisture.....: 14

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	85.7	10.0	%	MCAWW 160.3 MOD	04/21-04/22/10	0111173

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 9-12)

GC Semivolatiles

Lot-Sample #....: A0D170469-028 Work Order #....: LX5T61AC Matrix.....: SO  
Date Sampled....: 04/16/10 09:55 Date Received..: 04/17/10  
Prep Date.....: 04/21/10 Analysis Date..: 04/26/10  
Prep Batch #....: 0111037  
Dilution Factor: 1  
% Moisture.....: 19 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	41	ug/kg
Aroclor 1221	ND	41	ug/kg
Aroclor 1232	ND	41	ug/kg
<b>Aroclor 1242</b>	<b>44</b>	<b>41</b>	<b>ug/kg</b>
Aroclor 1248	ND	41	ug/kg
Aroclor 1254	ND	41	ug/kg
Aroclor 1260	ND	41	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	68	(10 - 196)	
Decachlorobiphenyl	85	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 9-12)

General Chemistry

Lot-Sample #....: A0D170469-028    Work Order #....: LX5T6                  Matrix.....: SO  
Date Sampled....: 04/16/10 09:55    Date Received..: 04/17/10  
% Moisture.....: 19

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	80.7	10.0	%	MCAWW 160.3 MOD	04/21-04/22/10	0111173

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 0-3)

GC Semivolatiles

Lot-Sample #....: A0D170469-029 Work Order #....: LX5T81AC Matrix.....: SO  
Date Sampled....: 04/16/10 10:20 Date Received..: 04/17/10  
Prep Date.....: 04/21/10 Analysis Date..: 04/26/10  
Prep Batch #....: 0111037  
Dilution Factor: 1  
% Moisture.....: 20 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	41	ug/kg
Aroclor 1221	ND	41	ug/kg
Aroclor 1232	ND	41	ug/kg
Aroclor 1242	ND	41	ug/kg
<b>Aroclor 1248</b>	<b>68</b>	<b>41</b>	<b>ug/kg</b>
Aroclor 1254	ND	41	ug/kg
Aroclor 1260	ND	41	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	66	(10 - 196)	
Decachlorobiphenyl	71	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 0-3)

General Chemistry

Lot-Sample #....: A0D170469-029    Work Order #....: LX5T8    Matrix.....: SO

Date Sampled....: 04/16/10 10:20    Date Received..: 04/17/10

% Moisture.....: 20

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
					<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	80.2	10.0	%	MCAWW 160.3 MOD	04/21-04/22/10	0111173

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 4-5)

GC Semivolatiles

Lot-Sample #....: A0D170469-030 Work Order #....: LX5VA1AC Matrix.....: SO  
Date Sampled....: 04/16/10 10:25 Date Received..: 04/17/10  
Prep Date.....: 04/21/10 Analysis Date..: 04/26/10  
Prep Batch #....: 0111042  
Dilution Factor: 1  
% Moisture.....: 22 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	42	ug/kg
Aroclor 1221	ND	42	ug/kg
Aroclor 1232	ND	42	ug/kg
Aroclor 1242	ND	42	ug/kg
Aroclor 1248	ND	42	ug/kg
Aroclor 1254	ND	42	ug/kg
Aroclor 1260	ND	42	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	67	(10	- 196)
Decachlorobiphenyl	68	(10	- 199)

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 4-5)

General Chemistry

Lot-Sample #....: A0D170469-030    Work Order #....: LX5VA                Matrix.....: SO  
Date Sampled....: 04/16/10 10:25    Date Received..: 04/17/10  
% Moisture.....: 22

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	78.4	10.0	%	MCAWW 160.3 MOD	04/21-04/22/10	0111173

Dilution Factor: 1

## Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 2-4)

## GC Semivolatiles

Lot-Sample #....: A0D170469-031 Work Order #....: LX5VC1AC Matrix.....: SO  
Date Sampled....: 04/16/10 10:45 Date Received..: 04/17/10  
Prep Date.....: 04/21/10 Analysis Date..: 04/26/10  
Prep Batch #....: 0111042  
Dilution Factor: 10  
% Moisture.....: 17 Method.....: SW846 8082

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Aroclor 1016	ND	400	ug/kg
Aroclor 1221	ND	400	ug/kg
Aroclor 1232	ND	400	ug/kg
Aroclor 1242	ND	400	ug/kg
<b>Aroclor 1248</b>	<b>5600</b>	<b>400</b>	<b>ug/kg</b>
Aroclor 1254	ND	400	ug/kg
<b>Aroclor 1260</b>	<b>650</b>	<b>400</b>	<b>ug/kg</b>

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	
		<u>RECOVERY</u>	<u>LIMITS</u>
Tetrachloro-m-xylene	79 DIL	(10 - 196)	
Decachlorobiphenyl	142 DIL	(10 - 199)	

**NOTE(S):**

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 2-4)

General Chemistry

Lot-Sample #....: A0D170469-031    Work Order #....: LX5VC                      Matrix.....: SO  
Date Sampled....: 04/16/10 10:45    Date Received..: 04/17/10  
% Moisture.....: 17

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	83.5	10.0	%	MCAWW 160.3 MOD	04/21-04/22/10	0111173

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 6-8)

GC Semivolatiles

Lot-Sample #....: A0D170469-032 Work Order #....: LX5VD1AC Matrix.....: SO  
Date Sampled....: 04/16/10 11:00 Date Received..: 04/17/10  
Prep Date.....: 04/21/10 Analysis Date..: 04/26/10  
Prep Batch #....: 0111042  
Dilution Factor: 1  
% Moisture.....: 28 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	46	ug/kg
Aroclor 1221	ND	46	ug/kg
Aroclor 1232	ND	46	ug/kg
Aroclor 1242	ND	46	ug/kg
Aroclor 1248	ND	46	ug/kg
Aroclor 1254	ND	46	ug/kg
Aroclor 1260	ND	46	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	69	(10	- 196)
Decachlorobiphenyl	71	(10	- 199)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 6-8)

General Chemistry

Lot-Sample #....: A0D170469-032    Work Order #....: LX5VD                      Matrix.....: SO  
Date Sampled....: 04/16/10 11:00    Date Received..: 04/17/10  
% Moisture.....: 28

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	72.1	10.0	%	MCAWW 160.3 MOD	04/21-04/22/10	0111173

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 6-8)D

GC Semivolatiles

Lot-Sample #....: A0D170469-033 Work Order #....: LX5VE1AC Matrix.....: SO  
Date Sampled....: 04/16/10 11:00 Date Received..: 04/17/10  
Prep Date.....: 04/21/10 Analysis Date..: 04/26/10  
Prep Batch #....: 0111042  
Dilution Factor: 1  
% Moisture.....: 29 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	46	ug/kg
Aroclor 1221	ND	46	ug/kg
Aroclor 1232	ND	46	ug/kg
Aroclor 1242	ND	46	ug/kg
Aroclor 1248	ND	46	ug/kg
Aroclor 1254	ND	46	ug/kg
Aroclor 1260	ND	46	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	74	(10 - 196)	
Decachlorobiphenyl	73	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] 6-8)D

General Chemistry

Lot-Sample #....: A0D170469-033    Work Order #....: LX5VE                Matrix.....: SO  
Date Sampled....: 04/16/10 11:00    Date Received..: 04/17/10  
% Moisture.....: 29

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	71.3	10.0	%	MCAWW 160.3 MOD	04/21-04/22/10	0111173

Dilution Factor: 1

**Environmental Quality Mgt., Inc.**

**Client Sample ID:** [REDACTED] RINSE

**GC Semivolatiles**

**Lot-Sample #....:** A0D170469-034    **Work Order #....:** LX5VF1AA    **Matrix.....:** WQ  
**Date Sampled....:** 04/16/10 11:05    **Date Received..:** 04/17/10  
**Prep Date.....:** 04/22/10    **Analysis Date..:** 04/26/10  
**Prep Batch #....:** 0112038  
**Dilution Factor:** 1    **Method.....:** SW846 8082

<b>PARAMETER</b>	<b>RESULT</b>	<b>REPORTING</b>	
		<b>LIMIT</b>	<b>UNITS</b>
Aroclor 1016	ND	1.0	ug/L
Aroclor 1221	ND	1.0	ug/L
Aroclor 1232	ND	1.0	ug/L
Aroclor 1242	ND	1.0	ug/L
Aroclor 1248	ND	1.0	ug/L
Aroclor 1254	ND	1.0	ug/L
Aroclor 1260	ND	1.0	ug/L

<b>SURROGATE</b>	<b>PERCENT</b>	<b>RECOVERY</b>	
		<b>RECOVERY</b>	<b>LIMITS</b>
Tetrachloro-m-xylene	78	( 27 - 130 )	
Decachlorobiphenyl	31	( 10 - 127 )	

**ST. CLAIR SHORES  
BON BRAE REMOVAL SITE  
ST. CLAIR SHORES, MICHIGAN  
DATA VALIDATION REPORT**

**Date:** May 20, 2010

**Laboratory:** TestAmerica, North Canton, Ohio

**Laboratory Work Order #s:** A0D210512

**Data Validation Performed By:** Lisa Graczyk, Weston Solutions, Inc. (WESTON<sup>®</sup>) Superfund Technical and Response Team (START)

**Weston Work Order #:** 20405.012.001.0893.00

This data validation report has been prepared by WESTON START under the START III Region V contract. This report documents the data validation for seven soil samples that were collected for the St. Clair Shores Bon Brae Removal Site that was analyzed for polychlorinated biphenyls (PCB) using U.S. Environmental Protection Agency (U.S. EPA) SW-846 Method 8082.

A quality assurance (QA) level II data package was received from TestAmerica. Note that the QA Level II data package does not contain chromatograms and instrument printouts. The data validation was conducted in general accordance with the U.S. EPA "Contract Laboratory Program National Functional Guidance for Superfund Organic Methods Data Review" dated June 2008. The attachment contains the results summary sheets.

**PCBs BY U.S. EPA SW-846 METHOD 8082**

**1. Samples**

The following table summarizes the samples for which this data validation was conducted.

<b>Samples</b>	<b>Lab ID</b>	<b>Matrix</b>	<b>Date Collected</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>
BON HEUR SB01(2-3)	A0D210512-001	Soil	4/19/2010	4/24/2010	4/28/2010
BON HEUR SB01(4-5)	A0D210512-002	Soil	4/19/2010	4/24/2010	4/28/2010
BON HEUR SB02(0-3)	A0D210512-003	Soil	4/19/2010	4/24/2010	4/28/2010
BON HEUR SB02(10-11)	A0D210512-004	Soil	4/19/2010	4/24/2010	4/28/2010
BON HEUR SB03(1-3)	A0D210512-005	Soil	4/19/2010	4/24/2010	4/28/2010
BON HEUR SB03(4-5)	A0D210512-006	Soil	4/19/2010	4/24/2010	4/28/2010
BON HEUR SB03(4-5)D	A0D210512-007	Soil	4/19/2010	4/24/2010	4/28/2010

**2. Holding Times**

The samples were analyzed within the required holding time limit of 14 days from sample collection to extraction and 40 days from extraction to analysis for soil samples.

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**3. Blanks**

Method blanks were analyzed with the samples as required and were free of target compound contamination above the reporting limit.

**4. Surrogates**

The surrogate recoveries were within the laboratory-established quality control (QC) limits for percent recovery.

**5. Laboratory Control Sample (LCS) Results**

The LCS and LCS duplicate recoveries and relative percent differences (RPD) were within the laboratory-established QC limits.

**6. Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Results**

The MS and MSD recoveries and RPDs were within the laboratory-established QC limits.

**7. Field Duplicate Results**

There is one field duplicate associated with this work order which is identified with a “D” suffix. For the field duplicate pair, all results were non-detect indicating a good correlation between the two results.

**8. Overall Assessment**

The data are acceptable for use based on the information received.

Data Validation Report  
St. Clair Shores Bon Brae Removal Site  
TestAmerica  
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**ATTACHMENT**

**TESTAMERICA  
RESULTS SUMMARY**

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] BON HEUR SB01(2-3)

GC Semivolatiles

Lot-Sample #....: A0D210512-001 Work Order #....: L0AFV1AC Matrix.....: SO  
Date Sampled....: 04/19/10 13:55 Date Received..: 04/21/10  
Prep Date.....: 04/24/10 Analysis Date..: 04/28/10  
Prep Batch #....: 0114012  
Dilution Factor: 1  
% Moisture.....: 15 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	39	ug/kg
Aroclor 1221	ND	39	ug/kg
Aroclor 1232	ND	39	ug/kg
Aroclor 1242	ND	39	ug/kg
Aroclor 1248	ND	39	ug/kg
Aroclor 1254	ND	39	ug/kg
Aroclor 1260	ND	39	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	73	(10	- 196)
Decachlorobiphenyl	83	(10	- 199)

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] BON HEUR SB01(2-3)

General Chemistry

Lot-Sample #....: A0D210512-001    Work Order #....: L0AFV                      Matrix.....: SO  
Date Sampled....: 04/19/10 13:55    Date Received..: 04/21/10  
% Moisture.....: 15

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	ANALYSIS DATE	BATCH #
Percent Solids	84.9	10.0	%	MCAWW 160.3 MOD	04/22-04/23/10	0112137

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] BON HEUR SB01(4-5)

GC Semivolatiles

Lot-Sample #....: A0D210512-002 Work Order #....: L0AFX1AC Matrix.....: SO  
Date Sampled....: 04/19/10 14:00 Date Received..: 04/21/10  
Prep Date.....: 04/24/10 Analysis Date..: 04/28/10  
Prep Batch #....: 0114012  
Dilution Factor: 1  
% Moisture.....: 21 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	42	ug/kg
Aroclor 1221	ND	42	ug/kg
Aroclor 1232	ND	42	ug/kg
Aroclor 1242	ND	42	ug/kg
Aroclor 1248	ND	42	ug/kg
Aroclor 1254	ND	42	ug/kg
Aroclor 1260	ND	42	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	67	(10 - 196)	
Decachlorobiphenyl	73	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] BON HEUR SB01(4-5)

General Chemistry

Lot-Sample #....: A0D210512-002    Work Order #....: L0AFX                  Matrix.....: SO  
Date Sampled....: 04/19/10 14:00    Date Received..: 04/21/10  
% Moisture.....: 21

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	ANALYSIS DATE	BATCH #
Percent Solids	78.7	10.0	%	MCAWW 160.3 MOD	04/22-04/23/10	0112137

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] BON HEUR SB02(0-3)

GC Semivolatiles

Lot-Sample #....: A0D210512-003 Work Order #....: L0AF01AC Matrix.....: SO  
Date Sampled....: 04/19/10 14:30 Date Received..: 04/21/10  
Prep Date.....: 04/24/10 Analysis Date..: 04/28/10  
Prep Batch #....: 0114012  
Dilution Factor: 1  
% Moisture.....: 18 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	40	ug/kg
Aroclor 1221	ND	40	ug/kg
Aroclor 1232	ND	40	ug/kg
Aroclor 1242	ND	40	ug/kg
<b>Aroclor 1248</b>	<b>83</b>	<b>40</b>	<b>ug/kg</b>
Aroclor 1254	ND	40	ug/kg
<b>Aroclor 1260</b>	<b>21 J</b>	<b>40</b>	<b>ug/kg</b>
SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	77	(10 - 196)	
Decachlorobiphenyl	121	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] BON HEUR SB02(0-3)

General Chemistry

Lot-Sample #....: A0D210512-003    Work Order #....: L0AF0                  Matrix.....: SO  
Date Sampled....: 04/19/10 14:30    Date Received..: 04/21/10  
% Moisture.....: 18

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	ANALYSIS DATE	BATCH #
Percent Solids	82.5	10.0	%	MCAWW 160.3 MOD	04/22-04/23/10	0112137

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] BON HEUR SB02(10-11)

GC Semivolatiles

Lot-Sample #....: A0D210512-004 Work Order #....: L0AF31AC Matrix.....: SO  
Date Sampled....: 04/19/10 14:35 Date Received..: 04/21/10  
Prep Date.....: 04/24/10 Analysis Date..: 04/28/10  
Prep Batch #....: 0114012  
Dilution Factor: 1  
% Moisture.....: 20 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	41	ug/kg
Aroclor 1221	ND	41	ug/kg
Aroclor 1232	ND	41	ug/kg
Aroclor 1242	ND	41	ug/kg
Aroclor 1248	ND	41	ug/kg
Aroclor 1254	ND	41	ug/kg
Aroclor 1260	ND	41	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	61	(10 - 196)	
Decachlorobiphenyl	70	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] BON HEUR SB02(10-11)

General Chemistry

Lot-Sample #....: A0D210512-004    Work Order #....: L0AF3                  Matrix.....: SO  
Date Sampled....: 04/19/10 14:35    Date Received..: 04/21/10  
% Moisture.....: 20

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	ANALYSIS DATE	BATCH #
Percent Solids	79.8	10.0	%	MCAWW 160.3 MOD	04/22-04/23/10	0112137

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] BON HEUR SB03(1-3)

GC Semivolatiles

Lot-Sample #....: A0D210512-005 Work Order #....: L0AF41AC Matrix.....: SO  
Date Sampled....: 04/19/10 15:15 Date Received..: 04/21/10  
Prep Date.....: 04/24/10 Analysis Date..: 04/28/10  
Prep Batch #....: 0114012  
Dilution Factor: 1  
% Moisture.....: 16 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	39	ug/kg
Aroclor 1221	ND	39	ug/kg
Aroclor 1232	ND	39	ug/kg
Aroclor 1242	ND	39	ug/kg
Aroclor 1248	ND	39	ug/kg
Aroclor 1254	ND	39	ug/kg
Aroclor 1260	ND	39	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	71	(10	- 196)
Decachlorobiphenyl	83	(10	- 199)

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] BON HEUR SB03(1-3)

General Chemistry

Lot-Sample #....: A0D210512-005    Work Order #....: L0AF4                  Matrix.....: SO  
Date Sampled....: 04/19/10 15:15    Date Received..: 04/21/10  
% Moisture.....: 16

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	ANALYSIS DATE	BATCH #
Percent Solids	84.2	10.0	%	MCAWW 160.3 MOD	04/22-04/23/10	0112137

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] BON HEUR SB03(4-5)

GC Semivolatiles

Lot-Sample #....: A0D210512-006 Work Order #....: L0AF51AC Matrix.....: SO  
Date Sampled....: 04/19/10 15:20 Date Received..: 04/21/10  
Prep Date.....: 04/24/10 Analysis Date..: 04/28/10  
Prep Batch #....: 0114012  
Dilution Factor: 1  
% Moisture.....: 20 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	41	ug/kg
Aroclor 1221	ND	41	ug/kg
Aroclor 1232	ND	41	ug/kg
Aroclor 1242	ND	41	ug/kg
Aroclor 1248	ND	41	ug/kg
Aroclor 1254	ND	41	ug/kg
Aroclor 1260	ND	41	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	68	(10 - 196)	
Decachlorobiphenyl	69	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] BON HEUR SB03(4-5)

General Chemistry

Lot-Sample #....: A0D210512-006    Work Order #....: L0AF5                  Matrix.....: SO  
Date Sampled....: 04/19/10 15:20    Date Received..: 04/21/10  
% Moisture.....: 20

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	ANALYSIS DATE	BATCH #
Percent Solids	80.4	10.0	%	MCAWW 160.3 MOD	04/22-04/23/10	0112137

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] BON HEUR SB03(4-5)D

GC Semivolatiles

Lot-Sample #....: A0D210512-007 Work Order #....: L0AF61AC Matrix.....: SO  
Date Sampled....: 04/19/10 15:20 Date Received..: 04/21/10  
Prep Date.....: 04/24/10 Analysis Date..: 04/28/10  
Prep Batch #....: 0114012  
Dilution Factor: 1  
% Moisture.....: 23 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	43	ug/kg
Aroclor 1221	ND	43	ug/kg
Aroclor 1232	ND	43	ug/kg
Aroclor 1242	ND	43	ug/kg
Aroclor 1248	ND	43	ug/kg
Aroclor 1254	ND	43	ug/kg
Aroclor 1260	ND	43	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	71	(10 - 196)	
Decachlorobiphenyl	73	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] BON HEUR SB03(4-5)D

General Chemistry

Lot-Sample #....: A0D210512-007    Work Order #....: L0AF6                  Matrix.....: SO  
Date Sampled....: 04/19/10 15:20    Date Received..: 04/21/10  
% Moisture.....: 23

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	ANALYSIS DATE	BATCH #
Percent Solids	77.2	10.0	%	MCAWW 160.3 MOD	04/22-04/23/10	0112137

Dilution Factor: 1

**ST. CLAIR SHORES  
BON BRAE REMOVAL SITE  
ST. CLAIR SHORES, MICHIGAN  
DATA VALIDATION REPORT**

**Date:** May 21, 2010

**Laboratory:** TestAmerica, North Canton, Ohio

**Laboratory Work Order #s:** A0D220509

**Data Validation Performed By:** Lisa Graczyk, Weston Solutions, Inc. (WESTON<sup>®</sup>) Superfund Technical and Response Team (START)

**Weston Work Order #:** 20405.012.001.0893.00

This data validation report has been prepared by WESTON START under the START III Region V contract. This report documents the data validation for three rinsate blanks, one wipe, and thirty-six soil samples that were collected for the St. Clair Shores Bon Brae Removal Site that was analyzed for polychlorinated biphenyls (PCB) using U.S. Environmental Protection Agency (U.S. EPA) SW-846 Method 8082.

A quality assurance (QA) level II data package was received from TestAmerica. Note that the QA Level II data package does not contain chromatograms and instrument printouts. The data validation was conducted in general accordance with the U.S. EPA "Contract Laboratory Program National Functional Guidance for Superfund Organic Methods Data Review" dated June 2008. The attachment contains the results summary sheets.

#### **PCBs BY U.S. EPA SW-846 METHOD 8082**

##### **1. Samples**

The following table summarizes the samples for which this data validation was conducted.

<b>Samples</b>	<b>Lab ID</b>	<b>Matrix</b>	<b>Date Collected</b>	<b>Date Prepared</b>	<b>Date Analyzed</b>
HARPER-SB11(0-1')	A0D220509-001	Soil	4/20/2010	4/26/2010	4/29/2010
HARPER-SB11(11-12')	A0D220509-002	Soil	4/20/2010	4/26/2010	4/29/2010
HARPER-SB12(2-3')	A0D220509-003	Soil	4/20/2010	4/26/2010	4/29/2010
HARPER-SB12(3-4')	A0D220509-004	Soil	4/20/2010	4/26/2010	4/29/2010
HARPER-SB13(0-2')	A0D220509-005	Soil	4/20/2010	4/26/2010	4/30/2010
HARPER-SB13(3-4')	A0D220509-006	Soil	4/20/2010	4/26/2010	4/29/2010
HARPER-SB14(0-2')	A0D220509-007	Soil	4/20/2010	4/26/2010	4/29/2010
HARPER-SB14(3-4')	A0D220509-008	Soil	4/20/2010	4/26/2010	4/29/2010
HARPER-SB14(3-4')D	A0D220509-009	Soil	4/20/2010	4/26/2010	4/29/2010
LAKELAND-SB01(0-3')	A0D220509-010	Soil	4/20/2010	4/26/2010	4/29/2010
LAKELAND-SB01(7-8')	A0D220509-011	Soil	4/20/2010	4/26/2010	4/29/2010
LAKELAND-SB02(1-3')	A0D220509-012	Soil	4/20/2010	4/26/2010	4/29/2010

Data Validation Report  
 St. Clair Shores Bon Brae Removal Site  
 TestAmerica  
 Laboratory Work Order #: A0D220509

Samples	Lab ID	Matrix	Date Collected	Date Prepared	Date Analyzed
LAKELAND-SB02(6-7')	A0D220509-013	Soil	4/20/2010	4/26/2010	4/29/2010
LAKELAND-RINSE	A0D220509-014	Water	4/20/2010	4/24/2010	4/27/2010
LAKELAND-SB01(3-5')	A0D220509-015	Soil	4/20/2010	4/26/2010	4/29/2010
LAKELAND-SB01(3-5')D	A0D220509-016	Soil	4/20/2010	4/26/2010	4/29/2010
LAKELAND-SB01(9-10')	A0D220509-017	Soil	4/20/2010	4/26/2010	4/29/2010
BONBRAE-WIPE01	A0D220509-018	Wipe	4/20/2010	4/27/2010	4/28/2010
SB05(0-2)	A0D220509-019	Soil	4/21/2010	4/26/2010	4/29/2010
SB05(0-2)D	A0D220509-020	Soil	4/21/2010	4/26/2010	4/29/2010
SB05(10-12)	A0D220509-021	Soil	4/21/2010	4/26/2010	4/29/2010
SB06(5-6)	A0D220509-022	Soil	4/21/2010	4/26/2010	4/29/2010
SB06(10-11)	A0D220509-023	Soil	4/21/2010	4/27/2010	4/30/2010
SB07(4-5)	A0D220509-024	Soil	4/21/2010	4/27/2010	4/30/2010
SB07(6-8)	A0D220509-025	Soil	4/21/2010	4/27/2010	4/30/2010
SB08(1-3)	A0D220509-026	Soil	4/21/2010	4/27/2010	4/30/2010
SB08(8-9)	A0D220509-027	Soil	4/21/2010	4/27/2010	4/30/2010
RINSE	A0D220509-028	Water	4/21/2010	4/24/2010	4/27/2010
BONBRAE-SB01(3-4')	A0D220509-029	Soil	4/20/2010	4/27/2010	4/30/2010
BONBRAE-SB01(9-10')	A0D220509-030	Soil	4/20/2010	4/27/2010	4/30/2010
HARPER-SB10(1-3')	A0D220509-031	Soil	4/20/2010	4/27/2010	4/30/2010
HARPER-SB10(1-3')D	A0D220509-032	Soil	4/20/2010	4/27/2010	4/30/2010
HARPER-SB10(6-7')	A0D220509-033	Soil	4/20/2010	4/27/2010	4/30/2010
BONBRAE-SB02(0-3')	A0D220509-034	Soil	4/20/2010	4/27/2010	4/30/2010
BONBRAE-SB02(3-6')	A0D220509-035	Soil	4/20/2010	4/27/2010	4/30/2010
BONBRAE-SB01(2-3')	A0D220509-036	Soil	4/20/2010	4/27/2010	4/30/2010
BONBRAE-SB01(9-10')	A0D220509-037	Soil	4/20/2010	4/27/2010	4/30/2010
BONBRAE-RINSE	A0D220509-038	Water	4/20/2010	4/24/2010	4/27/2010
BONBRAE-SB02(2-3')	A0D220509-039	Soil	4/20/2010	4/27/2010	4/30/2010
BONBRAE-SB02(6-9')	A0D220509-040	Soil	4/20/2010	4/27/2010	4/30/2010

## 2. Holding Times

The samples were analyzed within the required holding time limit of 14 days from sample collection to extraction and 40 days from extraction to analysis for soil samples; and 7 days from sample collection to extraction and 40 days from extraction to analysis for water samples.

Data Validation Report  
St. Clair Shores Bon Brae Removal Site  
TestAmerica  
Laboratory Work Order #: A0D220509

**3. Blanks**

Method blanks were analyzed with the samples as required and were free of target compound contamination above the reporting limit.

**4. Surrogates**

The surrogate recoveries were within the laboratory-established quality control (QC) limits for percent recovery except in two instances where the surrogates could not be recovered due to high dilutions required. No qualification is required in these instances.

**5. Laboratory Control Sample (LCS) Results**

The LCS and LCS duplicate recoveries and relative percent differences (RPD) were within the laboratory-established QC limits.

**6. Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Results**

The MS and MSD recoveries and RPDs were within the laboratory-established QC limits.

**7. Field Duplicate Results**

There are four field duplicates associated with this work order which are identified with a "D" suffix. For two of the field duplicate pairs, all results were non-detect.

For sample [REDACTED] SB05(0-2) and its duplicate, the RPDs were 93 and 109 percent which are high. For sample [REDACTED] HARPER-SB10(1-3) and its duplicate, Aroclor 1254 was detected in the duplicate at 78 microgram per kilogram but not detected in the parent sample. These results likely indicate a heterogeneity associated with the soil matrix and PCBs.

**8. Overall Assessment**

The laboratory appropriately flagged some results with a "J" because the results are below the reporting limit. These results should be considered estimated.

The data are acceptable for use based on the information received.

Data Validation Report  
St. Clair Shores Bon Brae Removal Site  
TestAmerica  
Laboratory Work Order #: A0D220509

**ATTACHMENT**

**TESTAMERICA  
RESULTS SUMMARY**

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] HARPER-SB11 (0-1')

GC Semivolatiles

Lot-Sample #....: A0D220509-001 Work Order #....: L0DCJ1AC Matrix.....: SO  
Date Sampled....: 04/20/10 11:55 Date Received..: 04/22/10  
Prep Date.....: 04/26/10 Analysis Date..: 04/29/10  
Prep Batch #....: 0115057  
Dilution Factor: 1  
% Moisture.....: 6.6 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	35	ug/kg
Aroclor 1221	ND	35	ug/kg
Aroclor 1232	ND	35	ug/kg
Aroclor 1242	ND	35	ug/kg
<b>Aroclor 1248</b>	<b>66</b>	<b>35</b>	<b>ug/kg</b>
Aroclor 1254	ND	35	ug/kg
Aroclor 1260	ND	35	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	58	(10 - 196)	
Decachlorobiphenyl	55	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] HARPER-SB11 (0-1')

General Chemistry

Lot-Sample #....: A0D220509-001    Work Order #....: L0DCJ                  Matrix.....: SO  
Date Sampled....: 04/20/10 11:55    Date Received..: 04/22/10  
% Moisture.....: 6.6

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	93.4	10.0	%	MCAWW 160.3 MOD	04/27-04/28/10	0117289

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] HARPER-SB11 (11-12')

GC Semivolatiles

Lot-Sample #....: A0D220509-002 Work Order #....: L0DCQ1AC Matrix.....: SO  
Date Sampled....: 04/20/10 12:00 Date Received..: 04/22/10  
Prep Date.....: 04/26/10 Analysis Date..: 04/29/10  
Prep Batch #....: 0115057  
Dilution Factor: 1  
% Moisture.....: 12 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	37	ug/kg
Aroclor 1221	ND	37	ug/kg
Aroclor 1232	ND	37	ug/kg
Aroclor 1242	ND	37	ug/kg
Aroclor 1248	ND	37	ug/kg
Aroclor 1254	ND	37	ug/kg
Aroclor 1260	ND	37	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	76	(10 - 196)	
Decachlorobiphenyl	54	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] HARPER-SB11 (11-12')

General Chemistry

Lot-Sample #....: A0D220509-002    Work Order #....: L0DCQ                Matrix.....: SO  
Date Sampled....: 04/20/10 12:00    Date Received..: 04/22/10  
% Moisture.....: 12

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	88.1	10.0	%	MCAWW 160.3 MOD	04/27-04/28/10	0117289

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] HARPER-SB12 (2-3')

GC Semivolatiles

Lot-Sample #....: A0D220509-003 Work Order #....: L0DCT1AC Matrix.....: SO  
Date Sampled....: 04/20/10 12:05 Date Received..: 04/22/10  
Prep Date.....: 04/26/10 Analysis Date..: 04/29/10  
Prep Batch #....: 0115057  
Dilution Factor: 1  
% Moisture.....: 21 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	42	ug/kg
Aroclor 1221	ND	42	ug/kg
Aroclor 1232	ND	42	ug/kg
Aroclor 1242	ND	42	ug/kg
Aroclor 1248	ND	42	ug/kg
Aroclor 1254	ND	42	ug/kg
Aroclor 1260	ND	42	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	79	(10	- 196)
Decachlorobiphenyl	55	(10	- 199)

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] HARPER-SB12 (2-3')

General Chemistry

Lot-Sample #....: A0D220509-003    Work Order #....: L0DCT                      Matrix.....: SO  
Date Sampled....: 04/20/10 12:05    Date Received..: 04/22/10  
% Moisture.....: 21

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	78.7	10.0	%	MCAWW 160.3 MOD	04/27-04/28/10	0117289

Dilution Factor: 1

**Environmental Quality Mgt., Inc.**

**Client Sample ID: [REDACTED] HARPER-SB12 (3-4')**

**GC Semivolatiles**

**Lot-Sample #....:** A0D220509-004    **Work Order #....:** L0DCV1AC        **Matrix.....:** SO  
**Date Sampled....:** 04/20/10 12:10    **Date Received..:** 04/22/10  
**Prep Date.....:** 04/26/10            **Analysis Date..:** 04/29/10  
**Prep Batch #....:** 0115057  
**Dilution Factor:** 1  
**% Moisture.....:** 22                  **Method.....:** SW846 8082

<b>PARAMETER</b>	<b>RESULT</b>	<b>REPORTING</b>	
		<b>LIMIT</b>	<b>UNITS</b>
Aroclor 1016	ND	42	ug/kg
Aroclor 1221	ND	42	ug/kg
Aroclor 1232	ND	42	ug/kg
Aroclor 1242	ND	42	ug/kg
Aroclor 1248	ND	42	ug/kg
Aroclor 1254	ND	42	ug/kg
Aroclor 1260	ND	42	ug/kg

<b>SURROGATE</b>	<b>RECOVERY</b>	<b>RECOVERY</b>	
		<b>LIMITS</b>	
Tetrachloro-m-xylene	79	(10 - 196)	
Decachlorobiphenyl	58	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] HARPER-SB12 (3-4')

General Chemistry

Lot-Sample #....: A0D220509-004    Work Order #....: L0DCV                      Matrix.....: SO  
Date Sampled....: 04/20/10 12:10    Date Received..: 04/22/10  
% Moisture.....: 22

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	77.9	10.0	%	MCAWW 160.3 MOD	04/27-04/28/10	0117289

Dilution Factor: 1

**Environmental Quality Mgt., Inc.**

**Client Sample ID: [REDACTED] HARPER-SB13 (0-2')**

**GC Semivolatiles**

**Lot-Sample #....:** A0D220509-005    **Work Order #....:** L0DC01AC    **Matrix.....:** SO  
**Date Sampled....:** 04/20/10 13:30    **Date Received..:** 04/22/10  
**Prep Date.....:** 04/26/10    **Analysis Date..:** 04/30/10  
**Prep Batch #....:** 0115057  
**Dilution Factor:** 10  
**% Moisture.....:** 20    **Method.....:** SW846 8082

<b>PARAMETER</b>	<b>RESULT</b>	<b>REPORTING</b>	
		<b>LIMIT</b>	<b>UNITS</b>
Aroclor 1016	ND	410	ug/kg
Aroclor 1221	ND	410	ug/kg
Aroclor 1232	ND	410	ug/kg
Aroclor 1242	ND	410	ug/kg
Aroclor 1248	ND	410	ug/kg
Aroclor 1254	ND	410	ug/kg
Aroclor 1260	ND	410	ug/kg

<b>SURROGATE</b>	<b>PERCENT</b>	<b>RECOVERY</b>	
		<b>RECOVERY</b>	<b>LIMITS</b>
Tetrachloro-m-xylene	97 DIL	(10 - 196)	
Decachlorobiphenyl	201 DIL,*	(10 - 199)	

**NOTE(S):**

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

\* Surrogate recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

Elevated reporting limits. The reporting limits are elevated due to matrix interference.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] HARPER-SB13 (0-2')

General Chemistry

Lot-Sample #....: A0D220509-005    Work Order #....: L0DC0                      Matrix.....: SO  
Date Sampled....: 04/20/10 13:30    Date Received..: 04/22/10  
% Moisture.....: 20

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	80.3	10.0	%	MCAWW 160.3 MOD	04/27-04/28/10	0117289

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] HARPER-SB13 (3-4')

GC Semivolatiles

Lot-Sample #....: A0D220509-006 Work Order #....: L0DC21AC Matrix.....: SO  
Date Sampled....: 04/20/10 13:35 Date Received..: 04/22/10  
Prep Date.....: 04/26/10 Analysis Date..: 04/29/10  
Prep Batch #....: 0115057  
Dilution Factor: 1  
% Moisture.....: 18 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	40	ug/kg
Aroclor 1221	ND	40	ug/kg
Aroclor 1232	ND	40	ug/kg
Aroclor 1242	ND	40	ug/kg
Aroclor 1248	ND	40	ug/kg
Aroclor 1254	ND	40	ug/kg
Aroclor 1260	ND	40	ug/kg

SURROGATE	RECOVERY	RECOVERY	
		LIMITS	
Tetrachloro-m-xylene	78	(10	- 196)
Decachlorobiphenyl	63	(10	- 199)

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] HARPER-SB13 (3-4')

General Chemistry

Lot-Sample #....: A0D220509-006    Work Order #....: L0DC2                  Matrix.....: SO  
Date Sampled....: 04/20/10 13:35    Date Received..: 04/22/10  
% Moisture.....: 18

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	82.3	10.0	%	MCAWW 160.3 MOD	04/27-04/28/10	0117289

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] HARPER-SB14-(0-2')

GC Semivolatiles

Lot-Sample #....: A0D220509-007 Work Order #....: L0DC31AC Matrix.....: SO  
Date Sampled....: 04/20/10 13:50 Date Received..: 04/22/10  
Prep Date.....: 04/26/10 Analysis Date..: 04/29/10  
Prep Batch #....: 0115057  
Dilution Factor: 1  
% Moisture.....: 13 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	38	ug/kg
Aroclor 1221	ND	38	ug/kg
Aroclor 1232	ND	38	ug/kg
Aroclor 1242	ND	38	ug/kg
<b>Aroclor 1248</b>	<b>530</b>	<b>38</b>	<b>ug/kg</b>
Aroclor 1254	ND	38	ug/kg
<b>Aroclor 1260</b>	<b>68</b>	<b>38</b>	<b>ug/kg</b>

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	78	(10 - 196)	
Decachlorobiphenyl	63	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] HARPER-SB14-(0-2')

General Chemistry

Lot-Sample #....: A0D220509-007    Work Order #....: L0DC3                  Matrix.....: SO  
Date Sampled....: 04/20/10 13:50    Date Received..: 04/22/10  
% Moisture.....: 13

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	86.7	10.0	%	MCAWW 160.3 MOD	04/27-04/28/10	0117289

Dilution Factor: 1

**Environmental Quality Mgt., Inc.**

**Client Sample ID: [REDACTED] HARPER-SB14-(3-4')**

**GC Semivolatiles**

**Lot-Sample #....:** A0D220509-008    **Work Order #....:** L0DC41AC    **Matrix.....:** SO  
**Date Sampled....:** 04/20/10 14:00    **Date Received..:** 04/22/10  
**Prep Date.....:** 04/26/10    **Analysis Date..:** 04/29/10  
**Prep Batch #....:** 0115057  
**Dilution Factor:** 1  
**% Moisture.....:** 20    **Method.....:** SW846 8082

<b>PARAMETER</b>	<b>RESULT</b>	<b>REPORTING</b>	
		<b>LIMIT</b>	<b>UNITS</b>
Aroclor 1016	ND	41	ug/kg
Aroclor 1221	ND	41	ug/kg
Aroclor 1232	ND	41	ug/kg
Aroclor 1242	ND	41	ug/kg
Aroclor 1248	ND	41	ug/kg
Aroclor 1254	ND	41	ug/kg
Aroclor 1260	ND	41	ug/kg

<b>SURROGATE</b>	<b>RECOVERY</b>	<b>RECOVERY</b>	
		<b>LIMITS</b>	
Tetrachloro-m-xylene	69	(10 - 196)	
Decachlorobiphenyl	57	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] HARPER-SB14-(3-4')

General Chemistry

Lot-Sample #....: A0D220509-008    Work Order #....: L0DC4                      Matrix.....: SO  
Date Sampled....: 04/20/10 14:00    Date Received..: 04/22/10  
% Moisture.....: 20

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	79.6	10.0	%	MCAWW 160.3 MOD	04/27-04/28/10	0117289

Dilution Factor: 1

**Environmental Quality Mgt., Inc.**

**Client Sample ID:** [REDACTED] HARPER-SB14-(3-4')D

**GC Semivolatiles**

**Lot-Sample #....:** A0D220509-009    **Work Order #....:** L0DC71AC    **Matrix.....:** SO  
**Date Sampled....:** 04/20/10 14:00    **Date Received..:** 04/22/10  
**Prep Date.....:** 04/26/10    **Analysis Date..:** 04/29/10  
**Prep Batch #....:** 0115057  
**Dilution Factor:** 1  
**% Moisture.....:** 17    **Method.....:** SW846 8082

<b>PARAMETER</b>	<b>RESULT</b>	<b>REPORTING</b>	
		<b>LIMIT</b>	<b>UNITS</b>
Aroclor 1016	ND	40	ug/kg
Aroclor 1221	ND	40	ug/kg
Aroclor 1232	ND	40	ug/kg
Aroclor 1242	ND	40	ug/kg
Aroclor 1248	ND	40	ug/kg
Aroclor 1254	ND	40	ug/kg
Aroclor 1260	ND	40	ug/kg

<b>SURROGATE</b>	<b>RECOVERY</b>	<b>RECOVERY</b>	
		<b>LIMITS</b>	
Tetrachloro-m-xylene	80	(10 - 196)	
Decachlorobiphenyl	67	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] HARPER-SB14-(3-4')D

General Chemistry

Lot-Sample #....: A0D220509-009    Work Order #....: L0DC7                      Matrix.....: SO  
Date Sampled....: 04/20/10 14:00    Date Received..: 04/22/10  
% Moisture.....: 17

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	83.1	10.0	%	MCAWW 160.3 MOD	04/27-04/28/10	0117289

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] LAKELAND-SB01-(0-3')

GC Semivolatiles

Lot-Sample #....: A0D220509-010 Work Order #....: L0DC81AC Matrix.....: SO  
Date Sampled....: 04/20/10 15:10 Date Received..: 04/22/10  
Prep Date.....: 04/26/10 Analysis Date..: 04/29/10  
Prep Batch #....: 0115057  
Dilution Factor: 1  
% Moisture.....: 17 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	40	ug/kg
Aroclor 1221	ND	40	ug/kg
Aroclor 1232	ND	40	ug/kg
Aroclor 1242	ND	40	ug/kg
Aroclor 1248	ND	40	ug/kg
<b>Aroclor 1254</b>	<b>25 J</b>	<b>40</b>	<b>ug/kg</b>
Aroclor 1260	ND	40	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	76	(10 - 196)	
Decachlorobiphenyl	70	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] LAKELAND-SB01-(0-3')

General Chemistry

Lot-Sample #....: A0D220509-010    Work Order #....: L0DC8                Matrix.....: SO  
Date Sampled....: 04/20/10 15:10    Date Received..: 04/22/10  
% Moisture.....: 17

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
					<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	82.6	10.0	%	MCAWW 160.3 MOD	04/27-04/28/10	0117298
		Dilution Factor:	1			

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] LAKELAND-SB01 (7-8')

GC Semivolatiles

Lot-Sample #....: A0D220509-011 Work Order #....: L0DC91AC Matrix.....: SO  
Date Sampled....: 04/20/10 15:15 Date Received..: 04/22/10  
Prep Date.....: 04/26/10 Analysis Date..: 04/29/10  
Prep Batch #....: 0115057  
Dilution Factor: 1  
% Moisture.....: 13 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	38	ug/kg
Aroclor 1221	ND	38	ug/kg
Aroclor 1232	ND	38	ug/kg
Aroclor 1242	ND	38	ug/kg
Aroclor 1248	ND	38	ug/kg
Aroclor 1254	ND	38	ug/kg
Aroclor 1260	ND	38	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	76	(10 - 196)	
Decachlorobiphenyl	70	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] LAKELAND-SB01 (7-8')

General Chemistry

Lot-Sample #....: A0D220509-011    Work Order #....: L0DC9                      Matrix.....: SO  
Date Sampled....: 04/20/10 15:15    Date Received..: 04/22/10  
% Moisture.....: 13

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	86.7	10.0	%	MCAWW 160.3 MOD	04/27-04/28/10	0117298

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] LAKELAND-SB02 (1-3')

GC Semivolatiles

Lot-Sample #....: A0D220509-012 Work Order #....: L0DDA1AC Matrix.....: SO  
Date Sampled....: 04/20/10 15:35 Date Received..: 04/22/10  
Prep Date.....: 04/26/10 Analysis Date..: 04/29/10  
Prep Batch #....: 0115057  
Dilution Factor: 1  
% Moisture.....: 20 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	41	ug/kg
Aroclor 1221	ND	41	ug/kg
Aroclor 1232	ND	41	ug/kg
Aroclor 1242	ND	41	ug/kg
Aroclor 1248	ND	41	ug/kg
Aroclor 1254	ND	41	ug/kg
Aroclor 1260	ND	41	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	72	(10 - 196)	
Decachlorobiphenyl	62	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] LAKELAND-SB02 (1-3')

General Chemistry

Lot-Sample #....: A0D220509-012    Work Order #....: L0DDA                      Matrix.....: SO  
Date Sampled....: 04/20/10 15:35    Date Received..: 04/22/10  
% Moisture.....: 20

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	79.6	10.0	%	MCAWW 160.3 MOD	04/27-04/28/10	0117298

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] LAKELAND-SB02 (6-7')

GC Semivolatiles

Lot-Sample #....: A0D220509-013 Work Order #....: L0DDE1AC Matrix.....: SO  
Date Sampled....: 04/20/10 15:40 Date Received..: 04/22/10  
Prep Date.....: 04/26/10 Analysis Date..: 04/29/10  
Prep Batch #....: 0115057  
Dilution Factor: 1  
% Moisture.....: 11 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	37	ug/kg
Aroclor 1221	ND	37	ug/kg
Aroclor 1232	ND	37	ug/kg
Aroclor 1242	ND	37	ug/kg
Aroclor 1248	ND	37	ug/kg
Aroclor 1254	ND	37	ug/kg
Aroclor 1260	ND	37	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	85	(10 - 196)	
Decachlorobiphenyl	71	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] LAKELAND-SB02 (6-7')

General Chemistry

Lot-Sample #....: A0D220509-013    Work Order #....: L0DDE                      Matrix.....: SO  
Date Sampled....: 04/20/10 15:40    Date Received..: 04/22/10  
% Moisture.....: 11

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	89.4	10.0	%	MCAWW 160.3 MOD	04/27-04/28/10	0117298

Dilution Factor: 1

**Environmental Quality Mgt., Inc.**

**Client Sample ID:** [REDACTED] **LAKELAND-RINSE**

**GC Semivolatiles**

**Lot-Sample #....:** A0D220509-014    **Work Order #....:** L0DDF1AA    **Matrix.....:** WQ  
**Date Sampled....:** 04/20/10 16:05    **Date Received..:** 04/22/10  
**Prep Date.....:** 04/24/10    **Analysis Date..:** 04/27/10  
**Prep Batch #....:** 0114010  
**Dilution Factor:** 1    **Method.....:** SW846 8082

<b>PARAMETER</b>	<b>RESULT</b>	<b>REPORTING</b>	
		<b>LIMIT</b>	<b>UNITS</b>
Aroclor 1016	ND	1.0	ug/L
Aroclor 1221	ND	1.0	ug/L
Aroclor 1232	ND	1.0	ug/L
Aroclor 1242	ND	1.0	ug/L
Aroclor 1248	ND	1.0	ug/L
Aroclor 1254	ND	1.0	ug/L
Aroclor 1260	ND	1.0	ug/L

<b>SURROGATE</b>	<b>PERCENT</b>	<b>RECOVERY</b>	
		<b>RECOVERY</b>	<b>LIMITS</b>
Tetrachloro-m-xylene	77	(27 - 130)	
Decachlorobiphenyl	28	(10 - 127)	

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] LAKELAND-SB01 (3-5')

GC Semivolatiles

Lot-Sample #....: A0D220509-015 Work Order #....: L0DDM1AC Matrix.....: SO  
Date Sampled....: 04/20/10 17:00 Date Received..: 04/22/10  
Prep Date.....: 04/26/10 Analysis Date..: 04/29/10  
Prep Batch #....: 0115057  
Dilution Factor: 1  
% Moisture.....: 17 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	40	ug/kg
Aroclor 1221	ND	40	ug/kg
Aroclor 1232	ND	40	ug/kg
Aroclor 1242	ND	40	ug/kg
Aroclor 1248	ND	40	ug/kg
Aroclor 1254	ND	40	ug/kg
Aroclor 1260	ND	40	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	76	(10 - 196)	
Decachlorobiphenyl	81	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] LAKELAND-SB01 (3-5')

General Chemistry

Lot-Sample #....: A0D220509-015    Work Order #....: L0DDM                      Matrix.....: SO  
Date Sampled....: 04/20/10 17:00    Date Received..: 04/22/10  
% Moisture.....: 17

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	83.0	10.0	%	MCAWW 160.3 MOD	04/27-04/28/10	0117298

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] LAKELAND-SB01 (3-5')D

GC Semivolatiles

Lot-Sample #....: A0D220509-016 Work Order #....: L0DD01AC Matrix.....: SO  
Date Sampled....: 04/20/10 17:00 Date Received..: 04/22/10  
Prep Date.....: 04/26/10 Analysis Date..: 04/29/10  
Prep Batch #....: 0115057  
Dilution Factor: 1  
% Moisture.....: 17 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	40	ug/kg
Aroclor 1221	ND	40	ug/kg
Aroclor 1232	ND	40	ug/kg
Aroclor 1242	ND	40	ug/kg
Aroclor 1248	ND	40	ug/kg
Aroclor 1254	ND	40	ug/kg
Aroclor 1260	ND	40	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	82	(10 - 196)	
Decachlorobiphenyl	96	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] LAKELAND-SB01 (3-5')D

General Chemistry

Lot-Sample #....: A0D220509-016    Work Order #....: L0DD0                      Matrix.....: SO  
Date Sampled....: 04/20/10 17:00    Date Received..: 04/22/10  
% Moisture.....: 17

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	83.4	10.0	%	MCAWW 160.3 MOD	04/27-04/28/10	0117298

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] LAKELAND-SB01 (9-10')

GC Semivolatiles

Lot-Sample #....: A0D220509-017 Work Order #....: L0DFF1AC Matrix.....: SO  
Date Sampled....: 04/20/10 17:05 Date Received..: 04/22/10  
Prep Date.....: 04/26/10 Analysis Date..: 04/29/10  
Prep Batch #....: 0115057  
Dilution Factor: 1  
% Moisture.....: 12 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	38	ug/kg
Aroclor 1221	ND	38	ug/kg
Aroclor 1232	ND	38	ug/kg
Aroclor 1242	ND	38	ug/kg
Aroclor 1248	ND	38	ug/kg
Aroclor 1254	ND	38	ug/kg
Aroclor 1260	ND	38	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	78	(10 - 196)	
Decachlorobiphenyl	72	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] LAKELAND-SB01 (9-10')

General Chemistry

Lot-Sample #....: A0D220509-017    Work Order #....: L0DFF                Matrix.....: SO  
Date Sampled....: 04/20/10 17:05    Date Received..: 04/22/10  
% Moisture.....: 12

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	87.5	10.0	%	MCAWW 160.3 MOD	04/27-04/28/10	0117298

Dilution Factor: 1

**Environmental Quality Mgt., Inc.**

**Client Sample ID:** [REDACTED] BONBRAE-WIPE01

**GC Semivolatiles**

**Lot-Sample #....:** A0D220509-018    **Work Order #....:** L0DFH1AA    **Matrix.....:** SW  
**Date Sampled....:** 04/20/10 16:00    **Date Received..:** 04/22/10  
**Prep Date.....:** 04/27/10    **Analysis Date..:** 04/28/10  
**Prep Batch #....:** 0117041  
**Dilution Factor:** 1    **Method.....:** SW846 8082

<u>PARAMETER</u>	<u>RESULT</u>	REPORTING	
		<u>LIMIT</u>	<u>UNITS</u>
Aroclor 1016	ND	4.0	ug
Aroclor 1221	ND	4.0	ug
Aroclor 1232	ND	4.0	ug
Aroclor 1242	ND	4.0	ug
Aroclor 1248	ND	4.0	ug
Aroclor 1254	ND	4.0	ug
Aroclor 1260	ND	4.0	ug

<u>SURROGATE</u>	<u>RECOVERY</u>	PERCENT	RECOVERY
		<u>LIMITS</u>	
Tetrachloro-m-xylene	125	(10 - 196)	
Decachlorobiphenyl	115	(10 - 199)	

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] (0-2)

GC Semivolatiles

Lot-Sample #....: A0D220509-019 Work Order #....: L0DFK1AC Matrix.....: SO  
Date Sampled....: 04/21/10 08:20 Date Received..: 04/22/10  
Prep Date.....: 04/26/10 Analysis Date..: 04/29/10  
Prep Batch #....: 0115057  
Dilution Factor: 10  
% Moisture.....: 5.4 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	350	ug/kg
Aroclor 1221	ND	350	ug/kg
Aroclor 1232	ND	350	ug/kg
Aroclor 1242	ND	350	ug/kg
<b>Aroclor 1248</b>	<b>4100</b>	<b>350</b>	<b>ug/kg</b>
Aroclor 1254	ND	350	ug/kg
<b>Aroclor 1260</b>	<b>480</b>	<b>350</b>	<b>ug/kg</b>

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	101 DIL	(10 - 196)	
Decachlorobiphenyl	94 DIL	(10 - 199)	

**NOTE(S):**

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] (0-2)

General Chemistry

Lot-Sample #....: A0D220509-019    Work Order #....: L0DFK                      Matrix.....: SO  
Date Sampled....: 04/21/10 08:20    Date Received..: 04/22/10  
% Moisture.....: 5.4

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	94.6	10.0	%	MCAWW 160.3 MOD	04/27-04/28/10	0117298

Dilution Factor: 1

## Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] (0-2)D

## GC Semivolatiles

Lot-Sample #....: A0D220509-020 Work Order #....: L0DFM1AC Matrix.....: SO  
Date Sampled....: 04/21/10 08:20 Date Received..: 04/22/10  
Prep Date.....: 04/26/10 Analysis Date..: 04/29/10  
Prep Batch #....: 0115057  
Dilution Factor: 5  
% Moisture.....: 5.7 Method.....: SW846 8082

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>	
		<u>LIMIT</u>	<u>UNITS</u>
Aroclor 1016	ND	170	ug/kg
Aroclor 1221	ND	170	ug/kg
Aroclor 1232	ND	170	ug/kg
Aroclor 1242	ND	170	ug/kg
<b>Aroclor 1248</b>	<b>1500</b>	<b>170</b>	<b>ug/kg</b>
Aroclor 1254	ND	170	ug/kg
<b>Aroclor 1260</b>	<b>140 J</b>	<b>170</b>	<b>ug/kg</b>

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>	
		<u>RECOVERY</u>	<u>LIMITS</u>
Tetrachloro-m-xylene	95 DIL	(10 - 196)	
Decachlorobiphenyl	87 DIL	(10 - 199)	

**NOTE(S):**

DIL The concentration is estimated or not reported due to dilution or the presence of interfering analytes.

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

**Environmental Quality Mgt., Inc.**

**Client Sample ID:** [REDACTED] (0-2)D

**General Chemistry**

**Lot-Sample #....:** A0D220509-020    **Work Order #....:** L0DFM    **Matrix.....:** SO  
**Date Sampled....:** 04/21/10 08:20    **Date Received..:** 04/22/10  
**% Moisture.....:** 5.7

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
					<u>ANALYSIS DATE</u>	<u>BATCH #</u>
<b>Percent Solids</b>	<b>94.3</b>	<b>10.0</b>	<b>%</b>	<b>MCAWW 160.3 MOD</b>	<b>04/27-04/28/10</b>	<b>0117298</b>

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] (10-12)

GC Semivolatiles

Lot-Sample #....: A0D220509-021 Work Order #....: L0DFN1AC Matrix.....: SO  
Date Sampled....: 04/21/10 08:25 Date Received..: 04/22/10  
Prep Date.....: 04/26/10 Analysis Date..: 04/29/10  
Prep Batch #....: 0115057  
Dilution Factor: 1  
% Moisture.....: 18 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	40	ug/kg
Aroclor 1221	ND	40	ug/kg
Aroclor 1232	ND	40	ug/kg
Aroclor 1242	ND	40	ug/kg
Aroclor 1248	ND	40	ug/kg
Aroclor 1254	ND	40	ug/kg
Aroclor 1260	ND	40	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	77	(10 - 196)	
Decachlorobiphenyl	73	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

**Environmental Quality Mgt., Inc.**

**Client Sample ID:** [REDACTED] (10-12)

**General Chemistry**

**Lot-Sample #....:** A0D220509-021    **Work Order #....:** L0DFN                    **Matrix.....:** SO  
**Date Sampled....:** 04/21/10 08:25    **Date Received..:** 04/22/10  
**% Moisture.....:** 18

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
					<u>ANALYSIS DATE</u>	<u>BATCH #</u>
<b>Percent Solids</b>	<b>81.7</b>	<b>10.0</b>	<b>%</b>	<b>MCAWW 160.3 MOD</b>	<b>04/27-04/28/10</b>	<b>0117298</b>

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] (5-6)

GC Semivolatiles

Lot-Sample #....: A0D220509-022 Work Order #....: L0DFP1AC Matrix.....: SO  
Date Sampled....: 04/21/10 08:55 Date Received..: 04/22/10  
Prep Date.....: 04/26/10 Analysis Date..: 04/29/10  
Prep Batch #....: 0115057  
Dilution Factor: 1  
% Moisture.....: 19 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	41	ug/kg
Aroclor 1221	ND	41	ug/kg
Aroclor 1232	ND	41	ug/kg
Aroclor 1242	ND	41	ug/kg
Aroclor 1248	ND	41	ug/kg
Aroclor 1254	ND	41	ug/kg
Aroclor 1260	ND	41	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	77	(10 - 196)	
Decachlorobiphenyl	74	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] (5-6)

General Chemistry

Lot-Sample #....: A0D220509-022    Work Order #....: L0DFP                Matrix.....: SO  
Date Sampled....: 04/21/10 08:55    Date Received..: 04/22/10  
% Moisture.....: 19

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	80.6	10.0	%	MCAWW 160.3 MOD	04/27-04/28/10	0117298

Dilution Factor: 1

**Environmental Quality Mgt., Inc.**

**Client Sample ID:** [REDACTED] (10-11)

**GC Semivolatiles**

**Lot-Sample #....:** A0D220509-023    **Work Order #....:** L0DFQ1AC    **Matrix.....:** SO  
**Date Sampled....:** 04/21/10 09:00    **Date Received..:** 04/22/10  
**Prep Date.....:** 04/27/10    **Analysis Date..:** 04/30/10  
**Prep Batch #....:** 0117042  
**Dilution Factor:** 1  
**% Moisture.....:** 12    **Method.....:** SW846 8082

<b>PARAMETER</b>	<b>RESULT</b>	<b>REPORTING</b>	
		<b>LIMIT</b>	<b>UNITS</b>
Aroclor 1016	ND	38	ug/kg
Aroclor 1221	ND	38	ug/kg
Aroclor 1232	ND	38	ug/kg
Aroclor 1242	ND	38	ug/kg
Aroclor 1248	ND	38	ug/kg
Aroclor 1254	ND	38	ug/kg
Aroclor 1260	ND	38	ug/kg

<b>SURROGATE</b>	<b>PERCENT</b>	<b>RECOVERY</b>	
		<b>RECOVERY</b>	<b>LIMITS</b>
Tetrachloro-m-xylene	72	(10 - 196)	
Decachlorobiphenyl	82	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

**Environmental Quality Mgt., Inc.**

**Client Sample ID:** [REDACTED] (10-11)

**General Chemistry**

**Lot-Sample #....:** A0D220509-023    **Work Order #....:** L0DFQ                **Matrix.....:** SO  
**Date Sampled....:** 04/21/10 09:00    **Date Received..:** 04/22/10  
**% Moisture.....:** 12

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
					<u>ANALYSIS DATE</u>	<u>BATCH #</u>
<b>Percent Solids</b>	<b>87.8</b>	<b>10.0</b>	<b>%</b>	<b>MCAWW 160.3 MOD</b>	<b>04/27-04/28/10</b>	<b>0117298</b>

Dilution Factor: 1

## Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] (4-5)

## GC Semivolatiles

Lot-Sample #....: A0D220509-024 Work Order #....: L0DFR1AC Matrix.....: SO  
Date Sampled....: 04/21/10 09:25 Date Received..: 04/22/10  
Prep Date.....: 04/27/10 Analysis Date..: 04/30/10  
Prep Batch #....: 0117042  
Dilution Factor: 1  
% Moisture.....: 19 Method.....: SW846 8082

<u>PARAMETER</u>	<u>RESULT</u>	REPORTING	
		<u>LIMIT</u>	<u>UNITS</u>
Aroclor 1016	ND	41	ug/kg
Aroclor 1221	ND	41	ug/kg
Aroclor 1232	ND	41	ug/kg
Aroclor 1242	ND	41	ug/kg
<b>Aroclor 1248</b>	<b>330</b>	<b>41</b>	<b>ug/kg</b>
Aroclor 1254	ND	41	ug/kg
<b>Aroclor 1260</b>	<b>25 J</b>	<b>41</b>	<b>ug/kg</b>
<u>SURROGATE</u>	<u>PERCENT</u>	RECOVERY	
		<u>RECOVERY</u>	<u>LIMITS</u>
Tetrachloro-m-xylene	77	(10 - 196)	
Decachlorobiphenyl	82	(10 - 199)	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] (4-5)

General Chemistry

Lot-Sample #....: A0D220509-024    Work Order #....: L0DFR                      Matrix.....: SO  
Date Sampled....: 04/21/10 09:25    Date Received..: 04/22/10  
% Moisture.....: 19

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	80.7	10.0	%	MCAWW 160.3 MOD	04/27-04/28/10	0117298

Dilution Factor: 1

## Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] (6-8)

## GC Semivolatiles

Lot-Sample #....: A0D220509-025 Work Order #....: L0DFT1AC Matrix.....: SO  
Date Sampled....: 04/21/10 09:30 Date Received..: 04/22/10  
Prep Date.....: 04/27/10 Analysis Date..: 04/30/10  
Prep Batch #....: 0117042  
Dilution Factor: 1  
% Moisture.....: 28 Method.....: SW846 8082

<u>PARAMETER</u>	<u>RESULT</u>	REPORTING	
		<u>LIMIT</u>	<u>UNITS</u>
Aroclor 1016	ND	46	ug/kg
Aroclor 1221	ND	46	ug/kg
Aroclor 1232	ND	46	ug/kg
<b>Aroclor 1242</b>	<b>350</b>	<b>46</b>	<b>ug/kg</b>
Aroclor 1248	ND	46	ug/kg
<b>Aroclor 1254</b>	<b>620</b>	<b>46</b>	<b>ug/kg</b>
Aroclor 1260	ND	46	ug/kg

<u>SURROGATE</u>	<u>PERCENT</u>	RECOVERY	
		<u>RECOVERY</u>	<u>LIMITS</u>
Tetrachloro-m-xylene	39	(10 - 196)	
Decachlorobiphenyl	46	(10 - 199)	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] (6-8)

General Chemistry

Lot-Sample #....: A0D220509-025    Work Order #....: L0DFT                      Matrix.....: SO  
Date Sampled....: 04/21/10 09:30    Date Received..: 04/22/10  
% Moisture.....: 28

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	71.9	10.0	%	MCAWW 160.3 MOD	04/27-04/28/10	0117298

Dilution Factor: 1

## Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] (1-3)

## GC Semivolatiles

Lot-Sample #....: A0D220509-026 Work Order #....: L0DFV1AC Matrix.....: SO  
Date Sampled....: 04/21/10 09:55 Date Received..: 04/22/10  
Prep Date.....: 04/27/10 Analysis Date..: 04/30/10  
Prep Batch #....: 0117042  
Dilution Factor: 1  
% Moisture.....: 20 Method.....: SW846 8082

<u>PARAMETER</u>	<u>RESULT</u>	REPORTING	
		<u>LIMIT</u>	<u>UNITS</u>
Aroclor 1016	ND	41	ug/kg
Aroclor 1221	ND	41	ug/kg
Aroclor 1232	ND	41	ug/kg
Aroclor 1242	ND	41	ug/kg
<b>Aroclor 1248</b>	<b>630</b>	<b>41</b>	<b>ug/kg</b>
Aroclor 1254	ND	41	ug/kg
<b>Aroclor 1260</b>	<b>99</b>	<b>41</b>	<b>ug/kg</b>

<u>SURROGATE</u>	<u>PERCENT</u>	RECOVERY	
		<u>RECOVERY</u>	<u>LIMITS</u>
Tetrachloro-m-xylene	73	(10 - 196)	
Decachlorobiphenyl	76	(10 - 199)	

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] (1-3)

General Chemistry

Lot-Sample #....: A0D220509-026    Work Order #....: L0DFV              Matrix.....: SO  
Date Sampled....: 04/21/10 09:55    Date Received..: 04/22/10  
% Moisture.....: 20

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	79.6	10.0	%	MCAWW 160.3 MOD	04/27-04/28/10	0117298

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] (8-9)

GC Semivolatiles

Lot-Sample #....: A0D220509-027 Work Order #....: L0DFW1AC Matrix.....: SO  
Date Sampled....: 04/21/10 10:00 Date Received..: 04/22/10  
Prep Date.....: 04/27/10 Analysis Date..: 04/30/10  
Prep Batch #....: 0117042  
Dilution Factor: 1  
% Moisture.....: 12 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	37	ug/kg
Aroclor 1221	ND	37	ug/kg
Aroclor 1232	ND	37	ug/kg
Aroclor 1242	ND	37	ug/kg
Aroclor 1248	ND	37	ug/kg
Aroclor 1254	ND	37	ug/kg
Aroclor 1260	ND	37	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	73	(10 - 196)	
Decachlorobiphenyl	80	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] (8-9)

General Chemistry

Lot-Sample #....: A0D220509-027    Work Order #....: L0DFW    Matrix.....: SO  
Date Sampled....: 04/21/10 10:00    Date Received..: 04/22/10  
% Moisture.....: 12

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	88.1	10.0	%	MCAWW 160.3 MOD	04/27-04/28/10	0117298

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] RINSE

GC Semivolatiles

Lot-Sample #...: A0D220509-028 Work Order #...: L0DFX1AA Matrix.....: WQ  
Date Sampled...: 04/21/10 10:05 Date Received..: 04/22/10  
Prep Date.....: 04/24/10 Analysis Date..: 04/27/10  
Prep Batch #...: 0114010  
Dilution Factor: 1 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	1.0	ug/L
Aroclor 1221	ND	1.0	ug/L
Aroclor 1232	ND	1.0	ug/L
Aroclor 1242	ND	1.0	ug/L
<b>Aroclor 1248</b>	<b>0.14 J</b>	<b>1.0</b>	<b>ug/L</b>
Aroclor 1254	ND	1.0	ug/L
Aroclor 1260	ND	1.0	ug/L

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	67	(27 - 130)	
Decachlorobiphenyl	29	(10 - 127)	

**NOTE(S):**

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] BONBRAE-SB01 (3-4')

GC Semivolatiles

Lot-Sample #....: A0D220509-029 Work Order #....: L0DF11AC Matrix.....: SO  
Date Sampled....: 04/20/10 09:35 Date Received..: 04/22/10  
Prep Date.....: 04/27/10 Analysis Date..: 04/30/10  
Prep Batch #....: 0117042  
Dilution Factor: 1  
% Moisture.....: 6.3 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	35	ug/kg
Aroclor 1221	ND	35	ug/kg
Aroclor 1232	ND	35	ug/kg
Aroclor 1242	ND	35	ug/kg
Aroclor 1248	ND	35	ug/kg
Aroclor 1254	ND	35	ug/kg
Aroclor 1260	ND	35	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	77	(10 - 196)	
Decachlorobiphenyl	84	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] BONBRAE-SB01 (3-4')

General Chemistry

Lot-Sample #....: A0D220509-029    Work Order #....: L0DF1                      Matrix.....: SO  
Date Sampled....: 04/20/10 09:35    Date Received..: 04/22/10  
% Moisture.....: 6.3

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	93.7	10.0	%	MCAWW 160.3 MOD	04/27-04/28/10	0117298

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] BONBRAE-SB01 (9-10')

GC Semivolatiles

Lot-Sample #....: A0D220509-030 Work Order #....: L0DF21AC Matrix.....: SO  
Date Sampled....: 04/20/10 09:40 Date Received..: 04/22/10  
Prep Date.....: 04/27/10 Analysis Date..: 04/30/10  
Prep Batch #....: 0117042  
Dilution Factor: 1  
% Moisture.....: 25 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	44	ug/kg
Aroclor 1221	ND	44	ug/kg
Aroclor 1232	ND	44	ug/kg
Aroclor 1242	ND	44	ug/kg
Aroclor 1248	ND	44	ug/kg
<b>Aroclor 1254</b>	<b>25 J</b>	<b>44</b>	<b>ug/kg</b>
Aroclor 1260	ND	44	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	72	(10 - 196)	
Decachlorobiphenyl	86	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] BONBRAE-SB01 (9-10')

General Chemistry

Lot-Sample #....: A0D220509-030    Work Order #....: L0DF2                  Matrix.....: SO  
Date Sampled....: 04/20/10 09:40    Date Received..: 04/22/10  
% Moisture.....: 25

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	75.2	10.0	%	MCAWW 160.3 MOD	04/27-04/28/10	0117298

Dilution Factor: 1

**Environmental Quality Mgt., Inc.**

**Client Sample ID: [REDACTED] HARPER-SB10 (1-3')**

**GC Semivolatiles**

**Lot-Sample #....:** A0D220509-031    **Work Order #....:** L0DF31AC    **Matrix.....:** SO  
**Date Sampled....:** 04/20/10 08:30    **Date Received..:** 04/22/10  
**Prep Date.....:** 04/27/10    **Analysis Date..:** 04/30/10  
**Prep Batch #....:** 0117042  
**Dilution Factor:** 1  
**% Moisture.....:** 21    **Method.....:** SW846 8082

<b>PARAMETER</b>	<b>RESULT</b>	<b>REPORTING</b>	
		<b>LIMIT</b>	<b>UNITS</b>
Aroclor 1016	ND	42	ug/kg
Aroclor 1221	ND	42	ug/kg
Aroclor 1232	ND	42	ug/kg
Aroclor 1242	ND	42	ug/kg
Aroclor 1248	ND	42	ug/kg
Aroclor 1254	ND	42	ug/kg
Aroclor 1260	ND	42	ug/kg

<b>SURROGATE</b>	<b>RECOVERY</b>	<b>PERCENT</b>	<b>RECOVERY</b>
		<b>LIMITS</b>	
Tetrachloro-m-xylene	83	(10 - 196)	
Decachlorobiphenyl	89	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] HARPER-SB10 (1-3')

General Chemistry

Lot-Sample #....: A0D220509-031    Work Order #....: L0DF3                      Matrix.....: SO  
Date Sampled....: 04/20/10 08:30    Date Received..: 04/22/10  
% Moisture.....: 21

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	79.0	10.0	%	MCAWW 160.3 MOD	04/27-04/28/10	0117298

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] HARPER-SB10 (1-3')D

GC Semivolatiles

Lot-Sample #....: A0D220509-032 Work Order #....: L0DF41AC Matrix.....: SO  
Date Sampled....: 04/20/10 08:30 Date Received..: 04/22/10  
Prep Date.....: 04/27/10 Analysis Date..: 04/30/10  
Prep Batch #....: 0117042  
Dilution Factor: 1  
% Moisture.....: 30 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	47	ug/kg
Aroclor 1221	ND	47	ug/kg
Aroclor 1232	ND	47	ug/kg
Aroclor 1242	ND	47	ug/kg
Aroclor 1248	ND	47	ug/kg
<b>Aroclor 1254</b>	<b>78</b>	<b>47</b>	<b>ug/kg</b>
Aroclor 1260	ND	47	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	76	(10 - 196)	
Decachlorobiphenyl	68	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] HARPER-SB10 (1-3')D

General Chemistry

Lot-Sample #....: A0D220509-032    Work Order #....: L0DF4                      Matrix.....: SO  
Date Sampled....: 04/20/10 08:30    Date Received..: 04/22/10  
% Moisture.....: 30

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	70.3	10.0	%	MCAWW 160.3 MOD	04/27-04/28/10	0117298

Dilution Factor: 1

**Environmental Quality Mgt., Inc.**

**Client Sample ID: [REDACTED] HARPER-SB10 (6-7')**

**GC Semivolatiles**

**Lot-Sample #....:** A0D220509-033    **Work Order #....:** L0DF51AC    **Matrix.....:** SO  
**Date Sampled....:** 04/20/10 08:35    **Date Received..:** 04/22/10  
**Prep Date.....:** 04/27/10    **Analysis Date..:** 04/30/10  
**Prep Batch #....:** 0117042  
**Dilution Factor:** 1  
**% Moisture.....:** 17    **Method.....:** SW846 8082

<b>PARAMETER</b>	<b>RESULT</b>	<b>REPORTING</b>	
		<b>LIMIT</b>	<b>UNITS</b>
Aroclor 1016	ND	40	ug/kg
Aroclor 1221	ND	40	ug/kg
Aroclor 1232	ND	40	ug/kg
Aroclor 1242	ND	40	ug/kg
Aroclor 1248	ND	40	ug/kg
Aroclor 1254	ND	40	ug/kg
Aroclor 1260	ND	40	ug/kg

<b>SURROGATE</b>	<b>RECOVERY</b>	<b>PERCENT</b>	<b>RECOVERY</b>
		<b>LIMITS</b>	
Tetrachloro-m-xylene	70	(10 - 196)	
Decachlorobiphenyl	75	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] HARPER-SB10 (6-7')

General Chemistry

Lot-Sample #....: A0D220509-033    Work Order #....: L0DF5                      Matrix.....: SO  
Date Sampled....: 04/20/10 08:35    Date Received..: 04/22/10  
% Moisture.....: 17

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
					<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	82.9	10.0	%	MCAWW 160.3 MOD	04/27-04/28/10	0117302
		Dilution Factor:	1			

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] BONBRAE-SB02 (0-3')

GC Semivolatiles

Lot-Sample #....: A0D220509-034 Work Order #....: L0DF61AC Matrix.....: SO  
Date Sampled....: 04/20/10 09:50 Date Received..: 04/22/10  
Prep Date.....: 04/27/10 Analysis Date..: 04/30/10  
Prep Batch #....: 0117042  
Dilution Factor: 1  
% Moisture.....: 16 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	39	ug/kg
Aroclor 1221	ND	39	ug/kg
Aroclor 1232	ND	39	ug/kg
Aroclor 1242	ND	39	ug/kg
Aroclor 1248	ND	39	ug/kg
<b>Aroclor 1254</b>	<b>21 J</b>	<b>39</b>	<b>ug/kg</b>
Aroclor 1260	ND	39	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	76	(10 - 196)	
Decachlorobiphenyl	89	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] BONBRAE-SB02 (0-3')

General Chemistry

Lot-Sample #....: A0D220509-034    Work Order #....: L0DF6                      Matrix.....: SO  
Date Sampled....: 04/20/10 09:50    Date Received..: 04/22/10  
% Moisture.....: 16

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	84.5	10.0	%	MCAWW 160.3 MOD	04/27-04/28/10	0117302

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] BONBRAE-SB02 (3-6')

GC Semivolatiles

Lot-Sample #....: A0D220509-035 Work Order #....: L0DF71AC Matrix.....: SO  
Date Sampled....: 04/20/10 09:55 Date Received..: 04/22/10  
Prep Date.....: 04/27/10 Analysis Date..: 04/30/10  
Prep Batch #....: 0117042  
Dilution Factor: 1  
% Moisture.....: 19 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	41	ug/kg
Aroclor 1221	ND	41	ug/kg
Aroclor 1232	ND	41	ug/kg
Aroclor 1242	ND	41	ug/kg
Aroclor 1248	ND	41	ug/kg
Aroclor 1254	ND	41	ug/kg
Aroclor 1260	ND	41	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	74	(10 - 196)	
Decachlorobiphenyl	85	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] BONBRAE-SB02 (3-6')

General Chemistry

Lot-Sample #....: A0D220509-035    Work Order #....: L0DF7                  Matrix.....: SO  
Date Sampled....: 04/20/10 09:55    Date Received..: 04/22/10  
% Moisture.....: 19

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	81.0	10.0	%	MCAWW 160.3 MOD	04/27-04/28/10	0117302

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] BONBRAE-SB01 (2-3')

GC Semivolatiles

Lot-Sample #....: A0D220509-036 Work Order #....: L0DF81AC Matrix.....: SO  
Date Sampled....: 04/20/10 10:20 Date Received..: 04/22/10  
Prep Date.....: 04/27/10 Analysis Date..: 04/30/10  
Prep Batch #....: 0117042  
Dilution Factor: 1  
% Moisture.....: 18 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	40	ug/kg
Aroclor 1221	ND	40	ug/kg
Aroclor 1232	ND	40	ug/kg
Aroclor 1242	ND	40	ug/kg
Aroclor 1248	ND	40	ug/kg
<b>Aroclor 1254</b>	<b>390</b>	<b>40</b>	<b>ug/kg</b>
Aroclor 1260	ND	40	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	79	(10 - 196)	
Decachlorobiphenyl	83	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] BONBRAE-SB01 (2-3')

General Chemistry

Lot-Sample #....: A0D220509-036    Work Order #....: L0DF8                  Matrix.....: SO  
Date Sampled....: 04/20/10 10:20    Date Received..: 04/22/10  
% Moisture.....: 18

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	81.7	10.0	%	MCAWW 160.3 MOD	04/27-04/28/10	0117302

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] BONBRAE-SB01 (9-10')

GC Semivolatiles

Lot-Sample #....: A0D220509-037 Work Order #....: L0DF91AC Matrix.....: SO  
Date Sampled....: 04/20/10 10:25 Date Received..: 04/22/10  
Prep Date.....: 04/27/10 Analysis Date..: 04/30/10  
Prep Batch #....: 0117042  
Dilution Factor: 1  
% Moisture.....: 11 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	37	ug/kg
Aroclor 1221	ND	37	ug/kg
Aroclor 1232	ND	37	ug/kg
Aroclor 1242	ND	37	ug/kg
Aroclor 1248	ND	37	ug/kg
Aroclor 1254	ND	37	ug/kg
Aroclor 1260	ND	37	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	78	(10 - 196)	
Decachlorobiphenyl	81	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] BONBRAE-SB01 (9-10')

General Chemistry

Lot-Sample #....: A0D220509-037 Work Order #....: L0DF9 Matrix.....: SO

Date Sampled....: 04/20/10 10:25 Date Received..: 04/22/10

% Moisture.....: 11

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
					<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	88.9	10.0	%	MCAWW 160.3 MOD	04/27-04/28/10	0117302

Dilution Factor: 1

**Environmental Quality Mgt., Inc.**

**Client Sample ID:** [REDACTED] BONBRAE-RINSE

**GC Semivolatiles**

**Lot-Sample #....:** A0D220509-038    **Work Order #....:** L0DGA1AA    **Matrix.....:** WQ  
**Date Sampled....:** 04/20/10 10:30    **Date Received..:** 04/22/10  
**Prep Date.....:** 04/24/10    **Analysis Date..:** 04/27/10  
**Prep Batch #....:** 0114010  
**Dilution Factor:** 1    **Method.....:** SW846 8082

<u>PARAMETER</u>	<u>RESULT</u>	REPORTING	
		<u>LIMIT</u>	<u>UNITS</u>
Aroclor 1016	ND	1.0	ug/L
Aroclor 1221	ND	1.0	ug/L
Aroclor 1232	ND	1.0	ug/L
Aroclor 1242	ND	1.0	ug/L
Aroclor 1248	ND	1.0	ug/L
Aroclor 1254	ND	1.0	ug/L
Aroclor 1260	ND	1.0	ug/L

<u>SURROGATE</u>	<u>RECOVERY</u>	PERCENT	RECOVERY
		<u>LIMITS</u>	
Tetrachloro-m-xylene	79	(27 - 130)	
Decachlorobiphenyl	46	(10 - 127)	

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] BONBRAE-SB02 (2-3')

GC Semivolatiles

Lot-Sample #....: A0D220509-039 Work Order #....: L0DGC1AC Matrix.....: SO  
Date Sampled....: 04/20/10 10:55 Date Received..: 04/22/10  
Prep Date.....: 04/27/10 Analysis Date..: 04/30/10  
Prep Batch #....: 0117042  
Dilution Factor: 1  
% Moisture.....: 15 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	39	ug/kg
Aroclor 1221	ND	39	ug/kg
Aroclor 1232	ND	39	ug/kg
Aroclor 1242	ND	39	ug/kg
Aroclor 1248	ND	39	ug/kg
Aroclor 1254	ND	39	ug/kg
Aroclor 1260	ND	39	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	74	(10 - 196)	
Decachlorobiphenyl	82	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] BONBRAE-SB02 (2-3')

General Chemistry

Lot-Sample #....: A0D220509-039    Work Order #....: L0DGC                      Matrix.....: SO  
Date Sampled....: 04/20/10 10:55    Date Received..: 04/22/10  
% Moisture.....: 15

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	84.8	10.0	%	MCAWW 160.3 MOD	04/27-04/28/10	0117302

Dilution Factor: 1

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] BONBRAE-SB02 (6-9')

GC Semivolatiles

Lot-Sample #....: A0D220509-040 Work Order #....: L0DGD1AC Matrix.....: SO  
Date Sampled....: 04/20/10 11:00 Date Received..: 04/22/10  
Prep Date.....: 04/27/10 Analysis Date..: 04/30/10  
Prep Batch #....: 0117042  
Dilution Factor: 1  
% Moisture.....: 12 Method.....: SW846 8082

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Aroclor 1016	ND	37	ug/kg
Aroclor 1221	ND	37	ug/kg
Aroclor 1232	ND	37	ug/kg
Aroclor 1242	ND	37	ug/kg
Aroclor 1248	ND	37	ug/kg
Aroclor 1254	ND	37	ug/kg
Aroclor 1260	ND	37	ug/kg

SURROGATE	PERCENT	RECOVERY	
		RECOVERY	LIMITS
Tetrachloro-m-xylene	73	(10 - 196)	
Decachlorobiphenyl	79	(10 - 199)	

**NOTE(S):**

Results and reporting limits have been adjusted for dry weight.

Environmental Quality Mgt., Inc.

Client Sample ID: [REDACTED] BONBRAE-SB02 (6-9')

General Chemistry

Lot-Sample #....: A0D220509-040    Work Order #....: L0DGD                  Matrix.....: SO  
Date Sampled....: 04/20/10 11:00    Date Received..: 04/22/10  
% Moisture.....: 12

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u>	<u>PREP</u>
			%	MCAWW 160.3 MOD	<u>ANALYSIS DATE</u>	<u>BATCH #</u>
Percent Solids	88.2	10.0	%	MCAWW 160.3 MOD	04/27-04/28/10	0117302

Dilution Factor: 1